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WOOD NATIONAL PARK STUDIES

DATA RELEASE NUMBER 2

REDWOOD CREEK

HUMBOLDT COUNTY

AND

MILL CREEK

DEL NORTE COUNTY

CALIFORNIA

APRIL 1, 1974 — SEPTEMBER 30, 1975

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OPEN-FILE REPORT - 76-7

PREPARED IN COOPERATION WITH THE
NATIONAL PARK SERVICE

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

REDWOOD NATIONAL PARK STUDIES, DATA RELEASE NUMBER 2,

REDWOOD CREEK, HUMBOLDT COUNTY, AND MILL CREEK,

DEL NORTE COUNTY, CALIFORNIA,

APRIL 11, 1974-SEPTEMBER 30, 1975

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and G. Douglas Glysson

ABSTRACT

An interdisciplinary study has been undertaken in Redwood National Park to describe parts of the ecosystems and recent changes in the intensity of erosion and sedimentation, define processes that may alter the natural ecosystems, and assess the impact of recent road construction and timber harvest. This report is the second of a series that will present data collected in this study.

Stream-discharge and water-quality data were collected at 53 sampling stations in the Redwood Creek and Mill Creek drainage basins. Measurements included the following variables: Stream stage and discharge; turbidity; sediment; onsite water-quality determinations of temperature, pH, total alkalinity, specific conductance, and dissolved-oxygen concentration; chemical analyses of water samples for major dissolved solids, selected trace elements, nitrogen, phosphorus, and organic carbon; chemical analyses of bottom sediment for organic carbon and pesticides; bacteria; benthic invertebrates; fish; periphyton; phytoplankton; and seston. Additional data include changes in geometry at 10 stream-channel cross sections along Mill Creek and the distribution of erosional landforms in the Mill Creek drainage basin; quantity and chemical composition of rainwater; and the intragravel-streambed condition at selected stations in the Redwood Creek drainage basin.

INTRODUCTION

Redwood National Park was created by Congress (Public Law 90-545) on October 2, 1968, to preserve examples of the terrestrial and aquatic ecosystems associated with coast redwood (*Sequoia sempervirens*) in northwestern California. The coast redwoods are the tallest trees on earth and, with their associated vegetation, streams, seashore, and wildlife, provide esthetic and recreational enjoyment for visitors. The coast redwood is also an important commercial resource providing a soft, strong, colorful wood that is resistant to decay and insect infestation. Nowhere else is the coast redwood found in such extensive dense stands.

The boundaries of Redwood National Park enclose virgin forest, prairies, and second-growth forest in formerly private timber and ranch land, small homesites, and three California State parks (fig. 1). The park is an irregularly shaped entity that extends northward from a point about 28 mi (45 km) north-northeast of Eureka to the Smith River in northern Del Norte County (fig. 1). In many places the park comprises small areas in the downstream parts of watersheds, and no direct Federal control is exercised on land-management practices in headwater areas. The boundary configuration presents the National Park Service with many difficult management problems related mostly to the potential impact of timber harvest and related road construction on mass movement, fluvial erosion and deposition, and water quality.

Land-use and related park-management problems probably are most acute in the one-half-mile (0.8 km) wide corridor that extends north-northwestward along Redwood Creek from the southern boundary of the park to a point near the mouth of Oscar Larson Creek (fig. 2). The corridor is in the downstream end of a 282 mi² (730 km²) drainage basin, the majority of which is naturally unstable terrain that has recently undergone and is presently undergoing intensive timber harvest. In the vicinity of the park, the dominant mode of logging in recent years has involved clearcutting of adjoining harvest units that are several hundred acres in size and downhill tractor-yarding of the fallen timber.

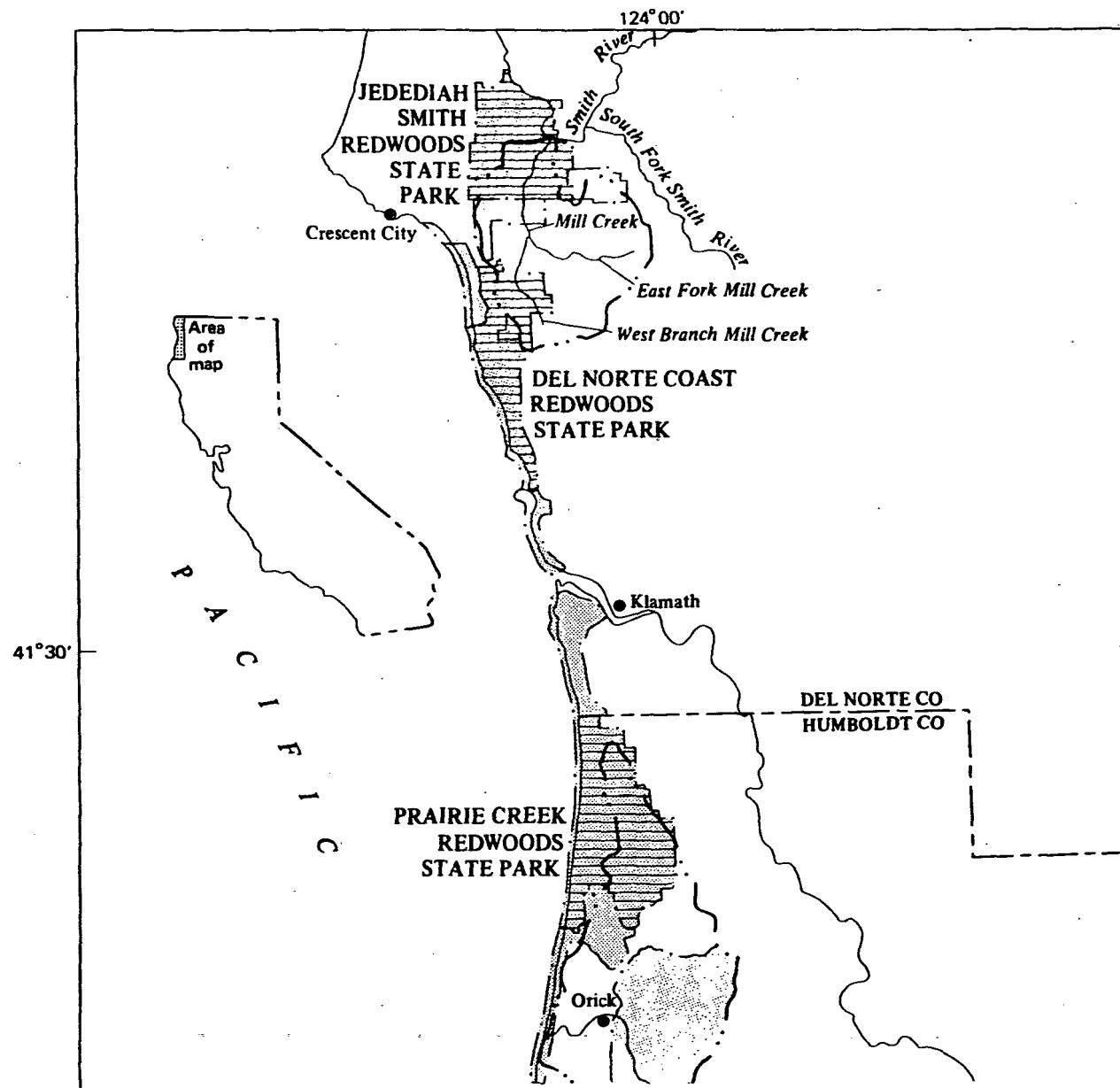
While this study has been in progress, timber-harvest practices in the vicinity of the park have been modified to reflect recent changes in California State forest practice regulations and cooperative agreements between the National Park Service and adjacent private landowners. These changes have been most significant in the vicinity of the Redwood Creek unit of Redwood National Park and include the adoption of smaller, staggered harvest units and uphill yarding by various cable systems. If the data in this report contain any implications concerning the impact of timber harvest on runoff, stream-sediment loads, chemical quality of surface water, and aquatic biota, those implications are specific to the mode of logging practiced in that particular setting. Their transfer value to other areas and other modes of logging is unknown at this time.

To gain information needed to decide on the relative merits of various park management options, an interagency-interdisciplinary team assembled in February 1973 by the National Park Service, Western Region, proposed a study to delineate and describe particular parts of the terrestrial and aquatic ecosystems in the park; describe recent changes in the intensity of erosion and sedimentation; define, insofar as possible, processes that may alter the natural ecosystems; and assess the impact of recent road construction and timber harvest on those processes.

The study was begun by personnel of the U.S. Geological Survey in cooperation with the National Park Service on September 1, 1973. Data collected include physical, chemical, and biological measurements in Redwood Creek, selected tributary streams, and the estuary (fig. 3), and in Mill Creek near Crescent City (fig. 4). Some data-collection activities were synoptic, in that data were collected simultaneously at several stations during selected winter storms and summer low-flow periods; other data collected year-around were nonsynoptic.

The purpose of this report, the second of a series, is to present a tabulation of the data collected in the Redwood Creek and Mill Creek drainage basins between April 11, 1974, and September 30, 1975, and to describe briefly the condition of the study area at the time of data collection. Data for this report were collected during the winter storm-runoff period (1974-75), receding-flow period of spring (1974 and 1975), and low-flow periods of summer and autumn (1974 and 1975). Reports containing a more detailed description of the Redwood Creek and Mill Creek drainage basins, data collected prior to September 1973, and interpretations of all available data are also being prepared.

The scope of this report is limited to the presentation of: (1) Physical data that include stream-channel cross sections, a map of erosional landforms, rainfall quantity, surface and intragravel water temperature, stream stage and discharge, turbidity, suspended-sediment concentration and particle-size distribution, bedload discharge and particle-size distribution, and particle-size composition of streambed materials; (2) chemical data from analyses of rainwater and stream water that include pH, total alkalinity, specific conductance, dissolved-oxygen concentration (surface and intragravel), major dissolved solids, selected trace elements, nitrogen and phosphorus compounds and organic carbon, and analyses of stream-bottom sediments for organic carbon and pesticides; and (3) biological data that include bacteria, benthic invertebrates, fish, periphyton, phytoplankton, and seston.



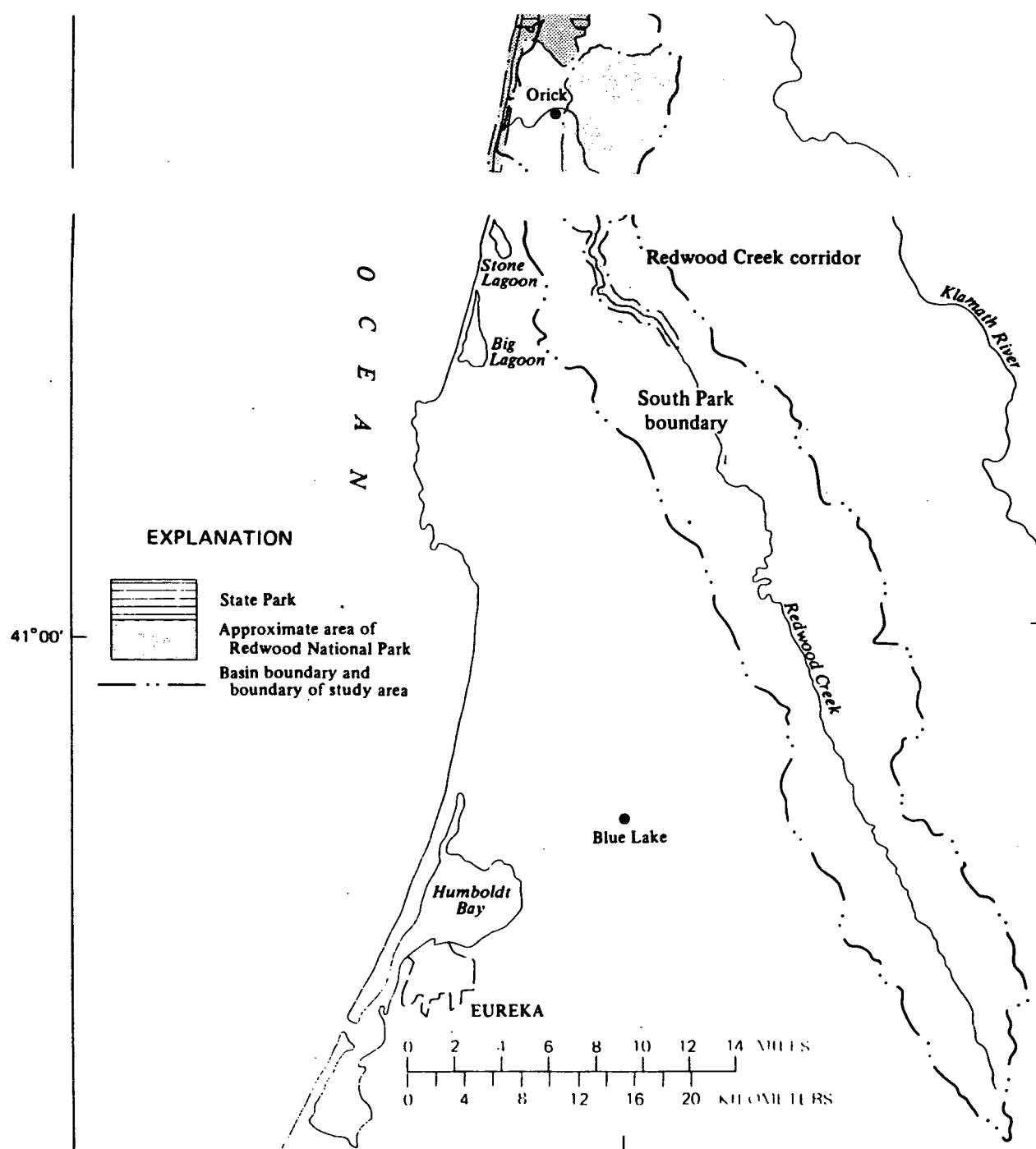


FIGURE 1.--Index map of Redwood National Park..

DESCRIPTION OF STUDY AREA

Redwood Creek

The drainage basin of Redwood Creek (fig. 2) consists of 282 mi² (730 km²) in the north Coast Ranges of California. The altitude of the drainage basin ranges from mean sea level to 5,300 ft (1,600 m). The drainage basin is elongated north-northwesterly and is about 56 mi (90 km) long and 4.5 to 6.9 mi (7 to 11 km) wide throughout most of the basin. It is roughly bisected by the straight to slightly sinuous main channel of Redwood Creek. The overall channel pattern is trellised, but some individual tributary basins display a dendritic pattern.

The drainage basin is characterized by high relief, steep unstable slopes, and narrow valley bottoms. Basin relief is 5,300 ft (1,600 m), but the cross-sectional relief normal to the basin axis is about 2,000 ft (600 m) in the north and more than 3,000 ft (900 m) near the head of the basin in the south. The relief of the individual tributary basins ranges from 1,320 ft (402 m) to 3,880 ft (1,180 m). All relief values less than 2,000 ft (600 m) are restricted to small northern tributary basins. Average hillslope gradients range from 34 percent in the southern quarter of the basin to 31 percent in the northern quarter. The hillslope gradients are generally steeper adjacent to the main channel than near the drainage basin boundary. About 35 percent of the basin shows landforms suggestive of former mass movement (Colman, 1973). Flood plains are discontinuous and narrow, and widths in excess of 200 ft (60 m) are uncommon except for areas between Minor Creek and Mill Creek, near the mouth of Lacks Creek, and near Orick.

Redwood Creek has a concave-upward profile with average gradients ranging from 550 ft/mi (100 m/km) above Smokehouse Creek to about 11 ft/mi (2.1 m/km) below Bridge Creek. The channel bed material is highly variable in size but generally becomes finer downstream. Cobbles and boulders are prevalent above Smokehouse Creek; sandy, pebble gravel is prevalent below Bridge Creek. Streamside berms of cobble gravel deposited by floodwaters occur discontinuously throughout the basin. Tributary streams throughout the basin have steep longitudinal profiles caused by landslides and accumulations of tree trunks and other organic debris.

A small estuary (somewhat restricted by stream channelization) occurs where Redwood Creek flows into the Pacific Ocean (fig. 3). During low flows of late summer and early autumn, the estuary is usually blocked by an emergent bar at the mouth. The first winter freshet, however, usually opens the channel at the ocean.

The entire drainage basin upstream from Prairie Creek is underlain by rocks of the Franciscan assemblage of late Jurassic and early Cretaceous age; texture zones 1, 2, and 3 of Blake and others (1967) are present. Volcanic and metavolcanic rocks are not common. Unmetamorphosed sedimentary rocks of texture zone 1 underlie most of the eastern side of the basin. The western part of the texture zone 1 rocks is composed mostly of complexly fractured siltstone and sandstone that locally resembles tracts of the Franciscan melange except that it lacks exotic blocks of amphibolite and volcanic rocks. Rocks in the eastern part of the texture zone 1 unit are less fractured and somewhat coarser grained than rocks in the western part. Phyllites and stretch-pebble conglomerates that are typical of texture zone 2 crop out along a narrow discontinuous belt between the unmetamorphosed sedimentary rocks of texture zone 1 and schist of texture zone 3. The rocks in texture zones 1 and 2 show similar types of soil profile development and commonly include the Hugo, Melbourne, Kneeland, Tyson, and Mendocino soil series. Texture zone 3, which has previously been mapped as the Kerr Ranch Schist of Manning and Ogle (1950, p. 13), crops out predominantly on the west side of the basin (Strand, 1962, 1963) and consists mostly of medium gray, well-foliated quartz-mica, quartz-mica-feldspar, and quartz-graphite schist. These schists have weathered mostly to the Orick, Masterson, and Sites soil series.

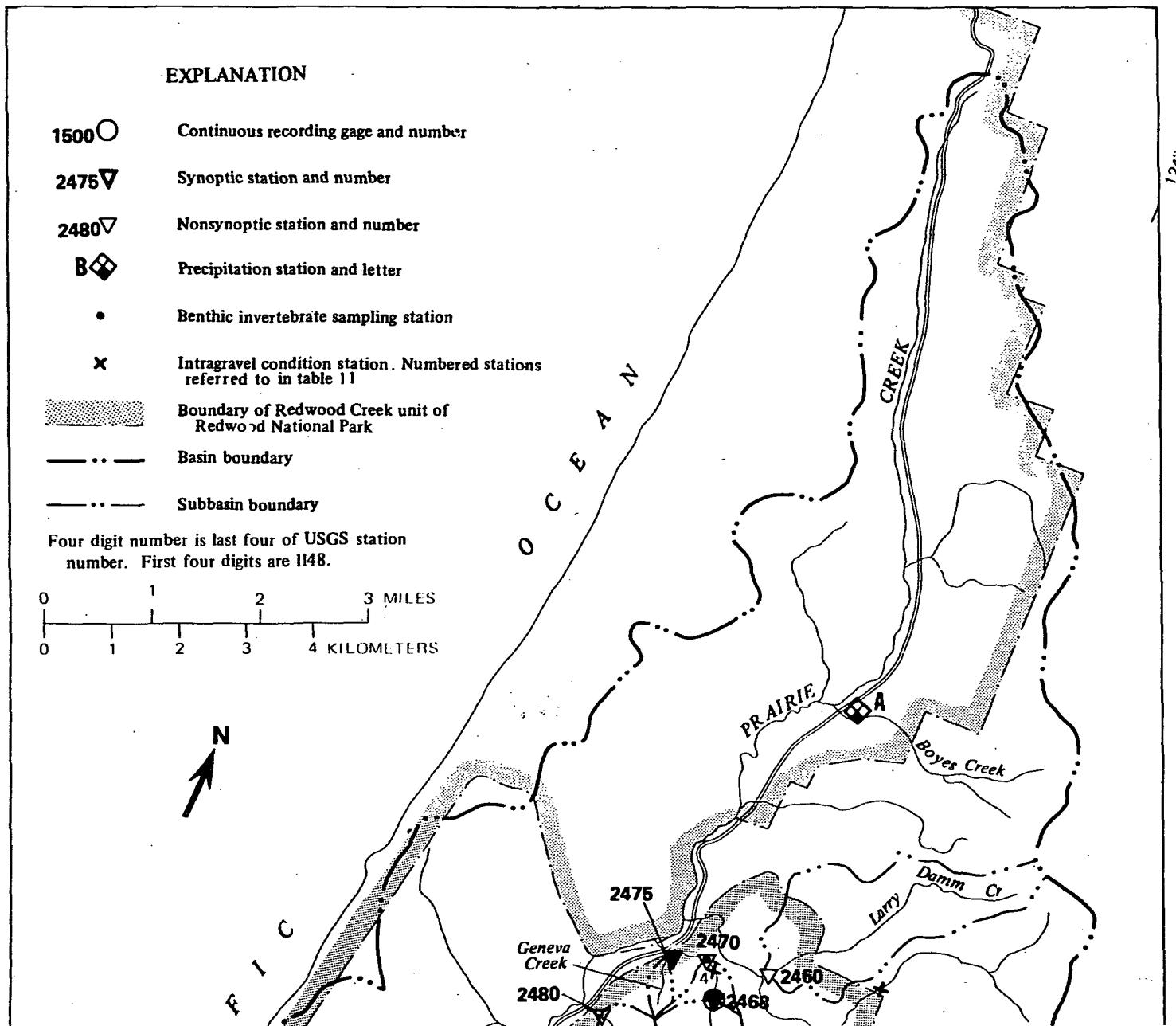
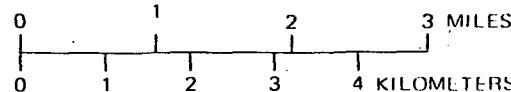
The contact between texture zones 2 and 3 and less metamorphosed rocks is the Grogan fault (Strand, 1962, 1963), a complex shear zone of variable width. This fault is adjacent to or only slightly east of the main channel of Redwood Creek throughout most of the drainage basin. Comparable faults separating schist from less metamorphosed rocks occur near the eastern and western drainage basin boundaries (Strand, 1962, 1963). North-northwest trending zones of sheared rocks also occur within texture zones 1 and 3 (for example, along Lacks Creek and Bridge Creek). The pervasively sheared rocks in these fault zones and others in the basin are the parent material for the Atwell soil series that is highly susceptible to landsliding. Where texture zone 2 rocks are present, they show a transitional contact with rocks of texture zone 1.

The northern part of the Redwood Creek drainage basin is strongly influenced by its proximity to the Pacific Ocean and has a coastal Mediterranean climate characterized by mild winters and short, warm, dry summers with frequent fog. The southern part of the basin has an interior Mediterranean climate with mild winters, hot, dry summers, and infrequent fog. The estimated basinwide precipitation, 80 in (2,000 mm) per year (Rantz, 1969), is greater than that associated with Mediterranean climates. Average annual rainfall ranges from about 70 in (1,800 mm) at Orick to about 100 in (2,500 mm) at Board Camp Mountain near the head of the basin. Rainfalls with durations of 6 hours and 24 hours and a recurrence interval of 2 years produce 2.0 to 2.6 in (51 to 66 mm) and 4.5 to 6.0 in (110 to 150 mm) of rain in the Redwood Creek drainage basin (Miller and others, 1973). In the southern end of the drainage basin, mean maximum temperatures for July range from 69°F (21°C) to 95°F (35°C), and mean minimum temperatures for January range from 32°F (0°C) to 37°F (3°C) (U.S. Weather Bureau, 1974).

EXPLANATION

- 1500○ Continuous recording gage and number
- 2475▽ Synoptic station and number
- 2480▽ Nonsynoptic station and number
- B♦ Precipitation station and letter
- Benthic invertebrate sampling station
- ✗ Intragravel condition station. Numbered stations referred to in table 11
- Boundary of Redwood Creek unit of Redwood National Park
- · — Basin boundary
- · · — Subbasin boundary

Four digit number is last four of USGS station number. First four digits are 1148.



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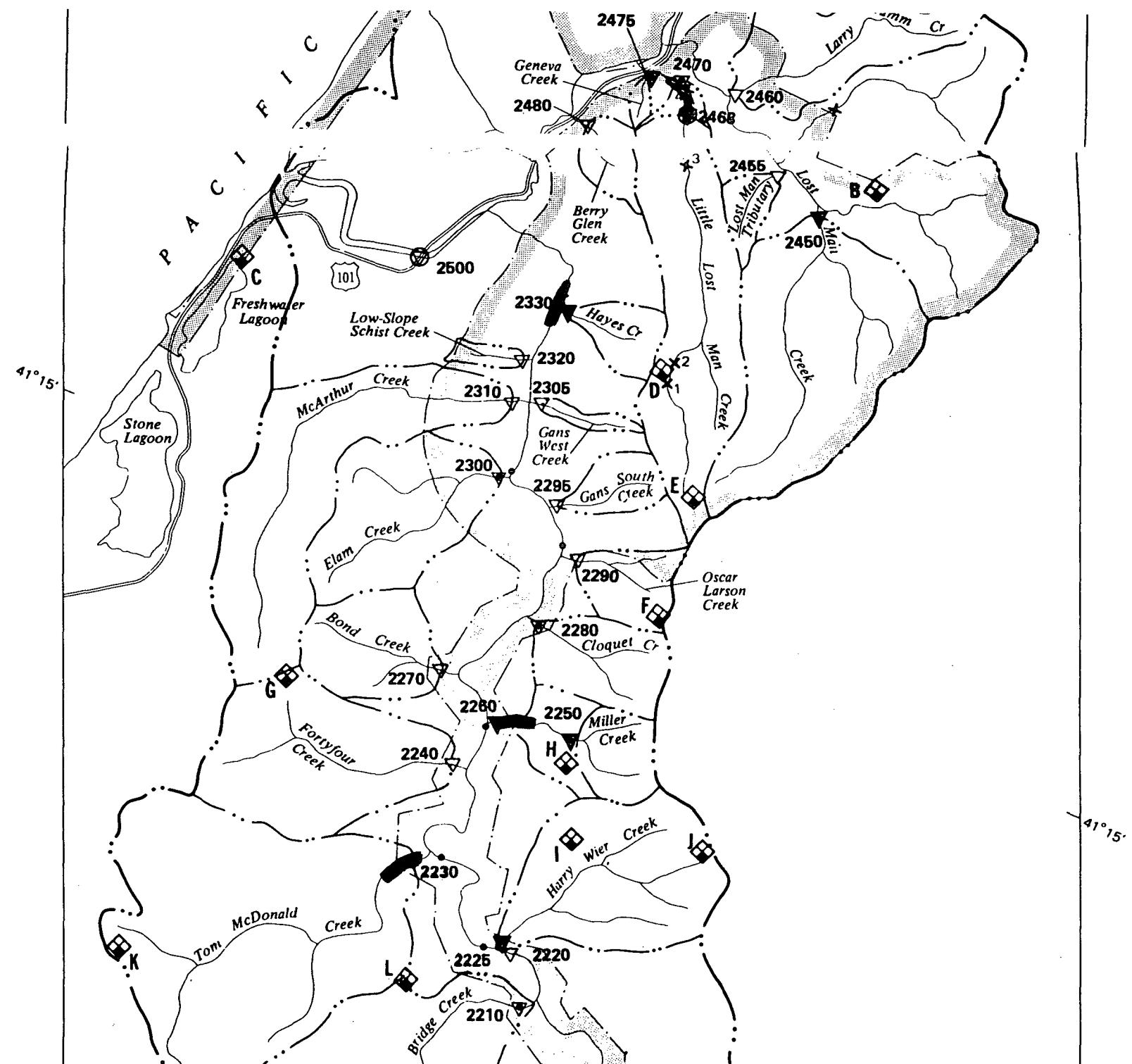
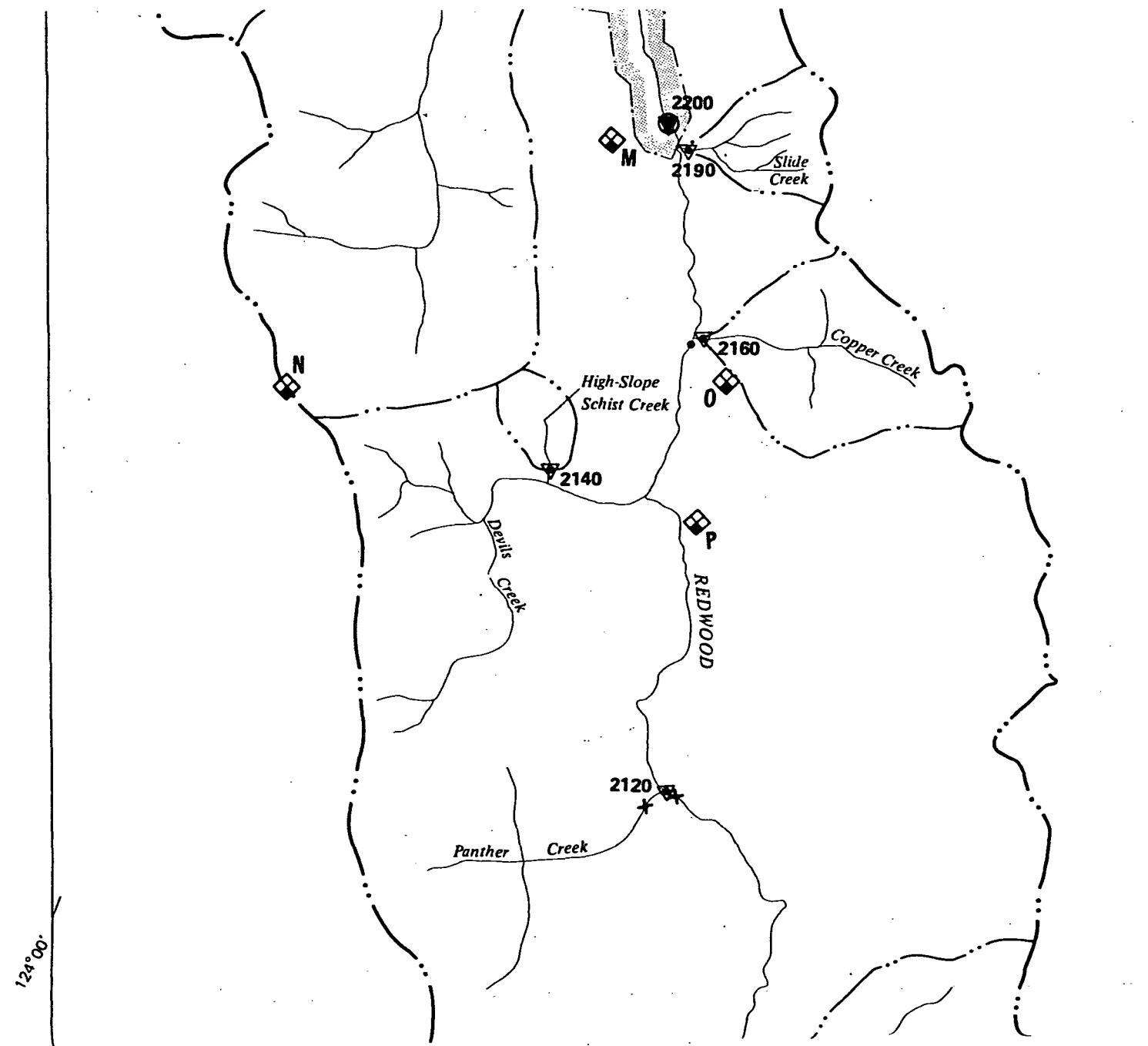


FIGURE 2.--Sampling stations in Redwood Creek area (Continued on following pages).

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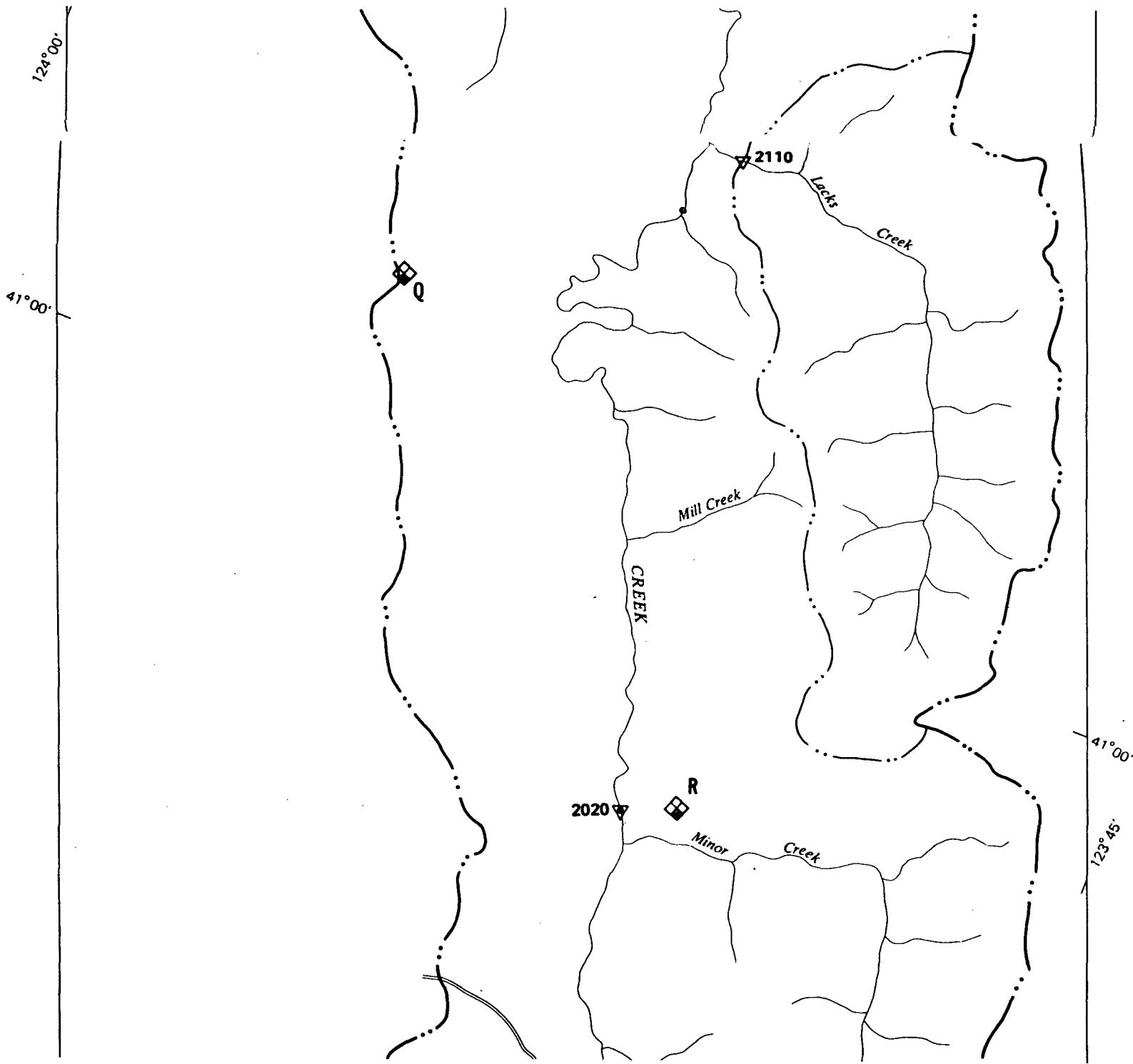
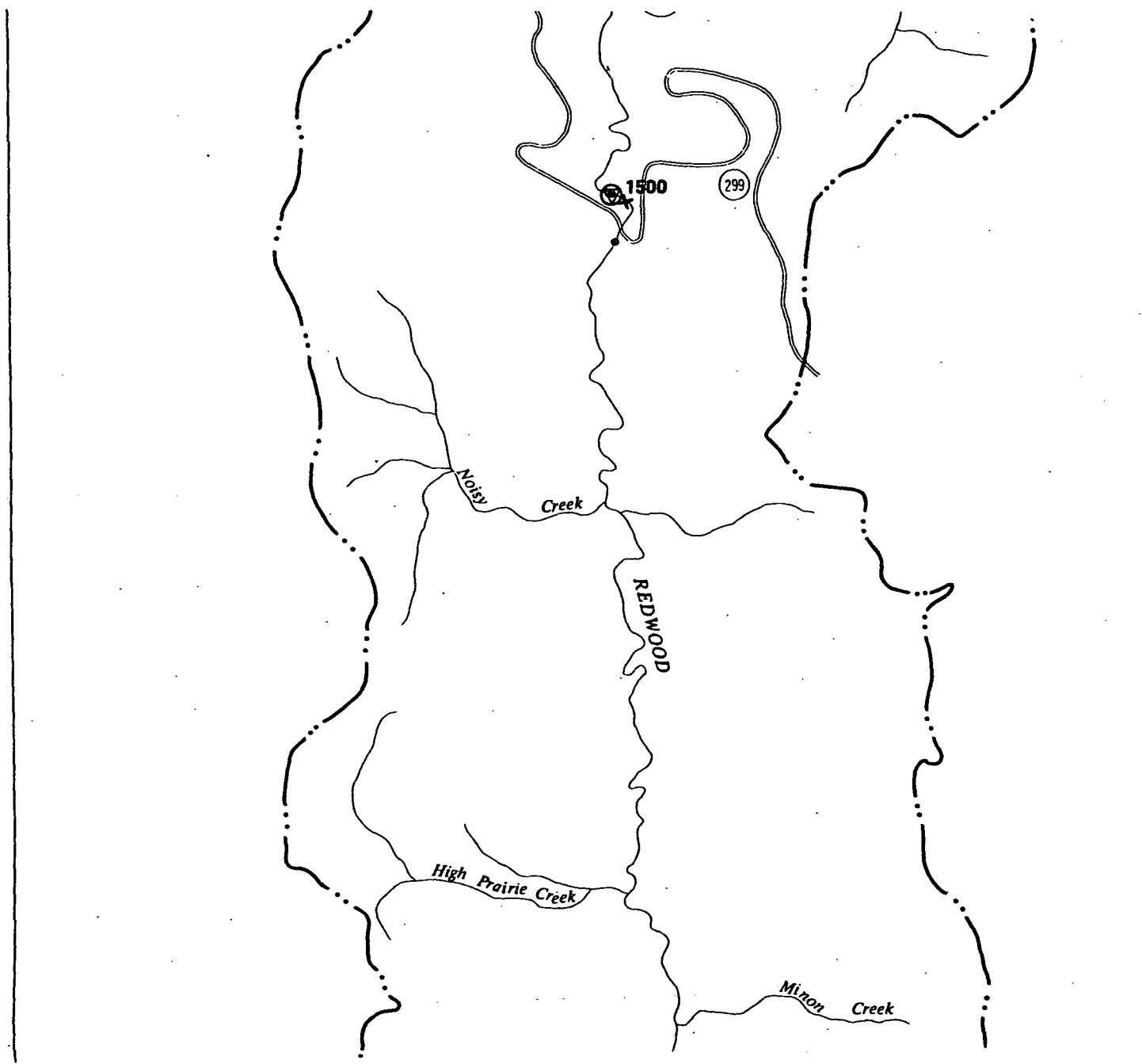


FIGURE 2.--Continued.



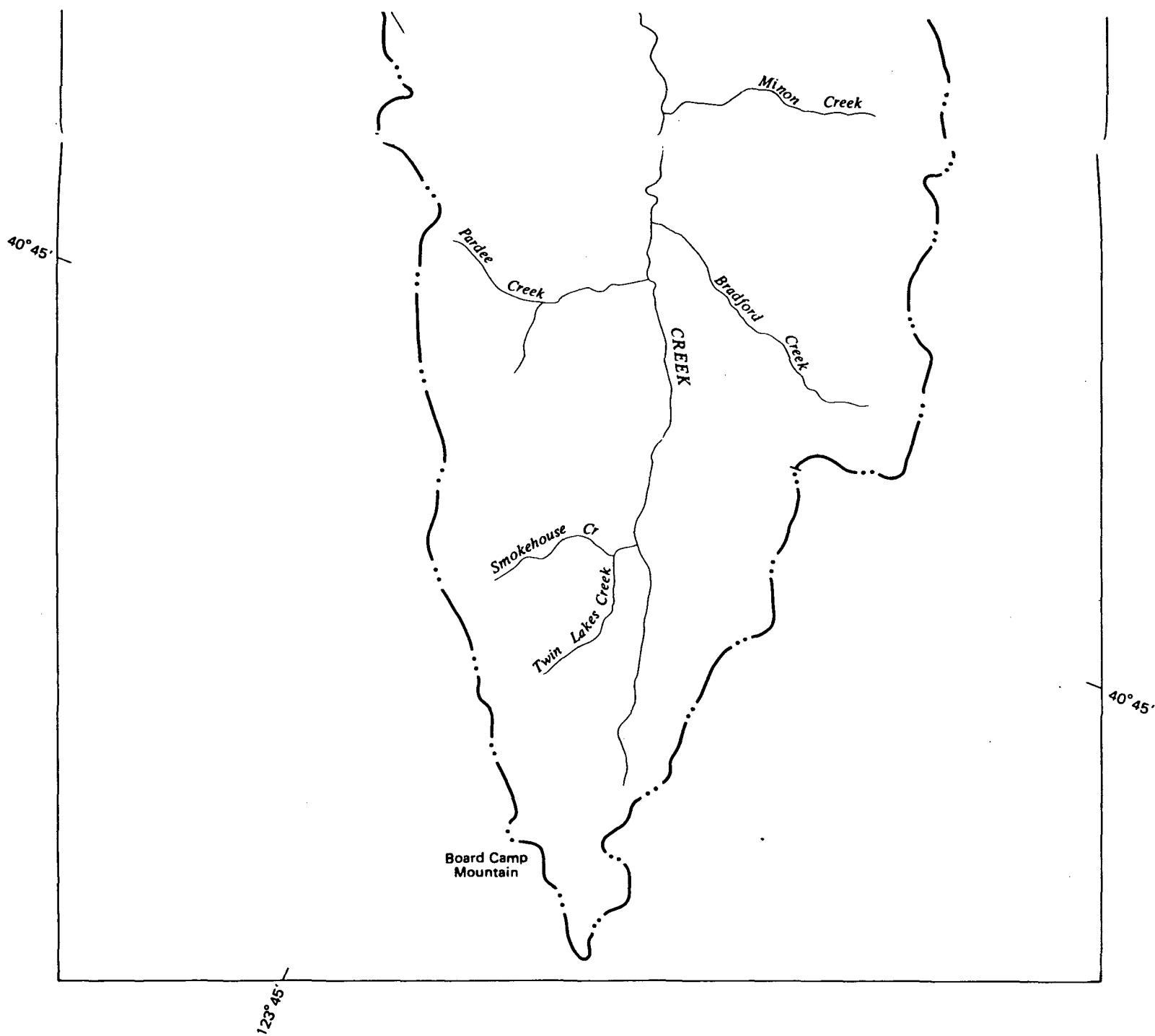


FIGURE 2.--Continued.

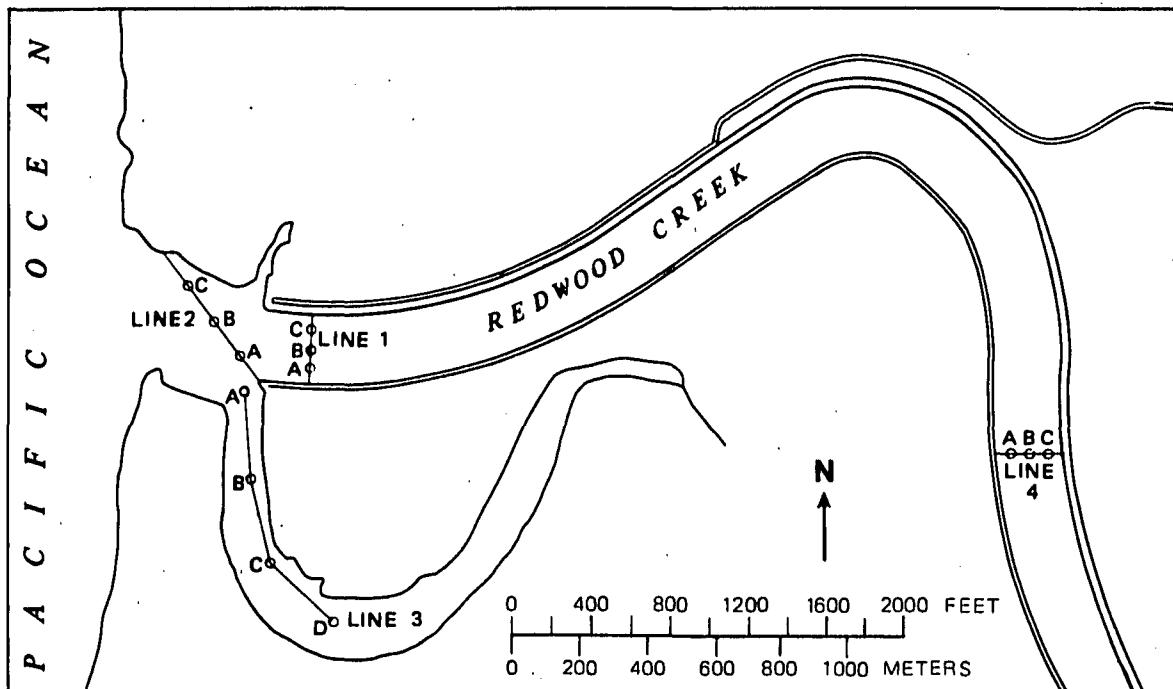


FIGURE 3.--Sampling stations in Redwood Creek estuary area.

Sitka spruce (*Picea sitchensis*) and shore pine (*Pinus contorta*) are the dominant trees on the lower flood plain of Redwood Creek near Orick and on windy sites near the estuary. Elsewhere the forests of the northern maritime part of the Redwood Creek drainage basin are dominated by redwoods and associated vegetation. The most commonly associated trees are Douglas-fir (*Pseudotsuga menziesii*), hemlock (*Tsuga heterophylla*), tanoak (*Lithocarpus densiflorous*), and grand fir (*Abies grandis*). At higher, drier sites Douglas-fir becomes more abundant, as does tanoak and madrone (*Arbutus menziesii*). In still more southern and southwestern parts of the basin, Douglas-fir is associated principally with white fir (*Abies concolor*), incense cedar (*Libocedrus decurrens*), and black oak (*Quercus kelloggii*). About 15 percent of the vegetation in the basin is prairie grass, brush, or grass and oak woodland. The most expansive tracts of nonarboreal vegetation occur on south- and west-facing slopes underlain by Franciscan rocks of texture zones 1 and 2.

Cutover timberland makes up about 65 percent of the drainage basin of Redwood Creek, and timber harvest continues to be a major activity. Most recent logging is concentrated in the northern part of the Redwood Creek basin that extends upstream to and includes the drainage basin of Lacks Creek.

Mill Creek

Some data presented in this report were collected in the drainage basin of Mill Creek, a major tributary to the Smith River near Crescent City, Calif. (fig. 4). Geological Survey-National Park Service study activities in the Mill Creek drainage basin have been less intensive than the Redwood Creek studies because Stone and others (1969, p. 37, 40-43, 55-56, 83-89) have suggested that a combination of natural factors and recent land management appear to make this basin less susceptible to man-induced erosion than Redwood Creek. Sizeable tracts of redwood-Douglas-fir and redwood-dominated vegetation have been set aside in two State parks and a part of Redwood National Park in the northern and western (downstream) parts of this basin. As in the case of Redwood Creek, the part of the Mill Creek drainage basin that lies upstream from the parkland consists mostly of commercial timberland over which no direct Federal land-management control is exercised.

The drainage basin of Mill Creek consists of 37 mi² (96 km²) of steep, high-relief, intricately dissected terrain. The southeast corner of the drainage basin is the most rugged part. The altitude of the drainage basin ranges from 70 ft (21 m) to 2,300 ft (700 m). The drainage basin boundaries between major tributary valleys are broad and gently sloping. Away from these boundaries, the hillslopes are characterized by straight or convex-upward profiles and steep gradients that frequently exceed 50 percent. Along the main channel and its major tributaries, broad, flat valley bottoms abut directly against the hillslopes. Throughout most of the basin these valley bottom flats represent the active flood plain. However, along most of the reach from one-half mile (0.8 km) below the confluence of the west branch and east fork downstream to the backwater deposits of the Smith River, Mill Creek flows in a rock-walled channel of restricted width incised several tens of feet into an old, broad alluvial strath terrace. The drainage basin, although nearly circular in shape, is slightly elongated in a northerly direction. The overall channel pattern is dendritic, but parts of the basin display a weakly trellised pattern, with some tributaries making abrupt right-angle bends. The channel gradients are generally regular and moderately steep. Local irregularities in gradient are associated with some concentrations of coarse organic debris. The channel bed material consists primarily of sandy pebble and cobble gravel.

The drainage basin is underlain predominantly by relatively unmetamorphosed sandstones of texture zone 1 of the Franciscan assemblage of rocks (Blake and others, 1967). Some metamorphic rocks assigned to texture zone 3 (and possibly texture zone 2) crop out on the eastern side of the north-northwest trending South Fork Mountain fault (Strand, 1963). Some serpentine and peridotite crop out along the drainage basin boundary between Mill Creek and the South Fork of the Smith River. Miocene marine deposits of the Weimer beds of Diller (1902) cap ridges in the northeastern part of the drainage basin. Unnamed alluvial gravels of late Cenozoic age containing numerous clasts of crystalline rocks derived from the Klamath Mountain province crop out along ridge crests in a large area centered about Childs Hill in the southeastern part of the basin and in smaller areas along ridges in the central part of the basin.

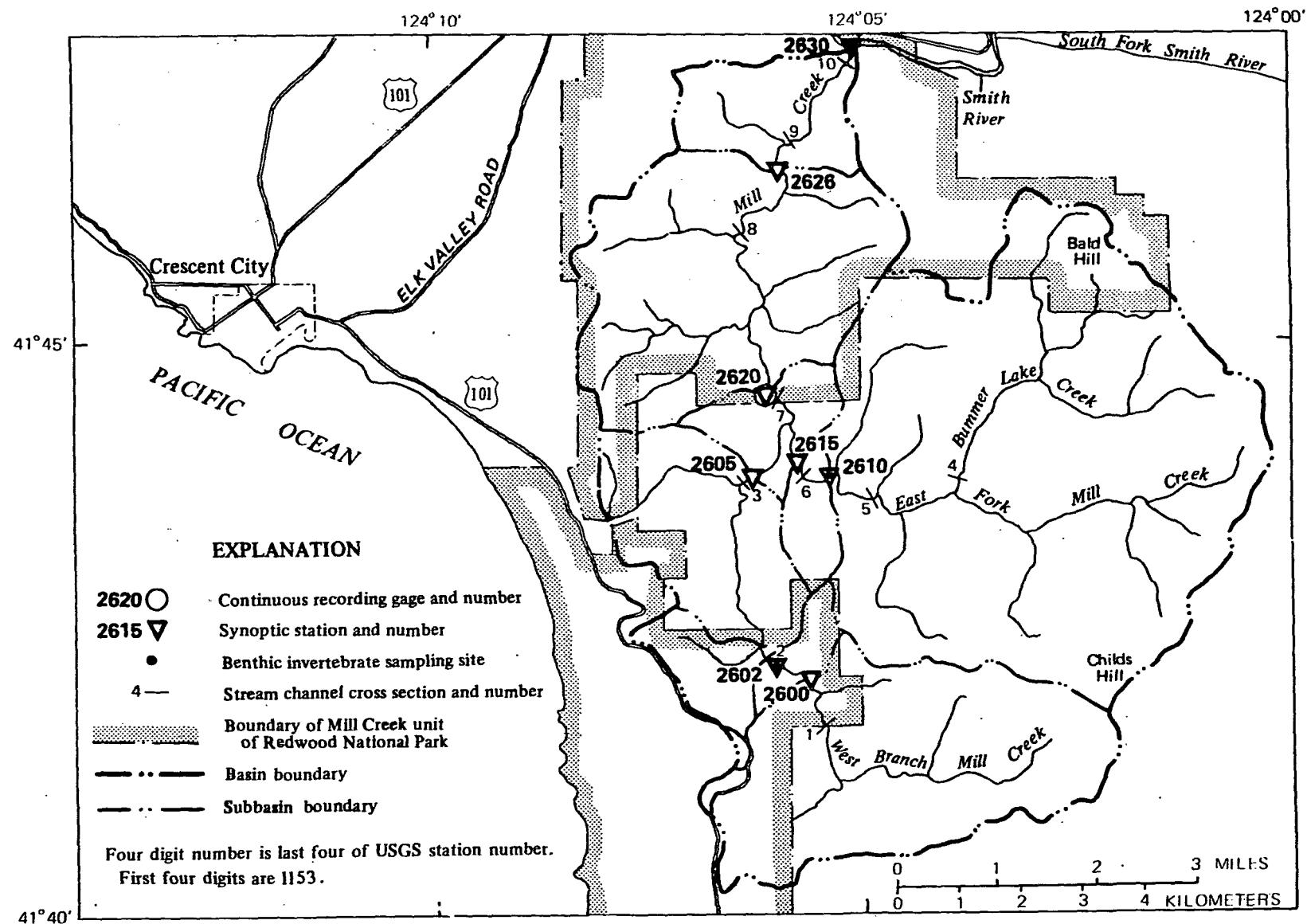


FIGURE 4.--Sampling stations in Mill Creek area.

The rocks in the Mill Creek drainage basin are not as pervasively fractured and sheared as comparable rocks in the Redwood Creek drainage basin. They have weathered largely to the Melbourne and Josephine soil series, which possess more cohesion than the Hugo soil series, the prevalent series on comparable sandstones in the Redwood Creek basin.

The drainage basin of Mill Creek has a coastal Mediterranean climate characterized by a pronounced high winter rainfall, mild winter temperatures, and a short, warm summer with frequent fog. The published rainfall and temperature records of the U.S. National Oceanic and Atmospheric Administration that are collected closest to this basin are from a station 1 mi (2 km) north of Crescent City. For the period 1890-1975, the mean annual rainfall there is 71.06 in (1,805 mm). For the period 1901-75, the mean maximum temperature for July is 66°F (19°C), and the mean minimum temperature for January is 37°F (3°C) (U.S. National Oceanic and Atmospheric Administration, 1974-75). Rantz (1969) estimated that most of the Mill Creek basin receives between 80 and 90 in (2,000 and 2,300 mm) of rainfall annually.

The entire basin, except the Bald Hill area along the divide between Mill Creek and the South Fork of the Smith River (fig. 4), bears a dense forest mostly of redwood and Douglas-fir. Groves of redwood-dominated vegetation occur on the flood plain, low terraces, and adjacent hillslopes in the north (downstream) end of the basin. The vegetation on the ridge-capping Miocene marine deposits is severely stunted. In the Bald Hill area, Jeffrey pine (*Pinus jeffreyi*) and Douglas-fir and grass woodland grows on soils derived from serpentine and peridotite.

At the end of 1974, the vegetation mosaic of the Mill Creek drainage basin consisted of about 49 percent old-growth forest, 30 percent recently logged area, 19 percent advanced second-growth forest, and 2 percent natural prairies and cleared land. Recent logging has involved separate clearcut harvest units of several tens of acres; both tractor-yarding and cable-yarding have been used.

TYPES OF DATA COLLECTED

Data were collected on physical processes of erosion, stream runoff, water quality, and aquatic biota. Two modes of data collection were used, depending on the type of data collected, frequency of collection, and season of collection. One mode was designated synoptic and the other nonsynoptic.

Synoptic

The synoptic studies were designed to collect similar types of data at similar frequencies, simultaneously, from selected streams in the study area (figs. 2 and 4). All synoptic studies were made within Redwood National Park with the exceptions of the Redwood Creek tributary station, Miller Creek near Orick, and three Mill Creek stations--West Branch Mill Creek at Bridge, East Fork Mill Creek, and East Fork Mill Creek at Bridge, near Crescent City. In the Redwood Creek drainage basin, synoptic studies were made during winter storms that occurred November 6-8 and November 20-22, 1974, and February 5-9 and February 12-14, 1975. Synoptic studies were made in the Mill Creek drainage basin during winter storms that occurred January 6-8 and March 17-19, 1975.

Ideally, measurements and sample collection during winter storms should start at the beginning of storm runoff and continue until stream discharge returns near the prestorm level. Sometimes, because of logistical problems or erratic storm patterns, sampling throughout the rise and recession of the stream was not possible.

In addition to winter-storm synoptic studies, diel (24-hour) synoptic studies were made during low-flow periods at selected sampling stations both within and outside the park boundary. In the Redwood Creek drainage basin, diel synoptic studies were made July 18-19 and September 10-11, 1974, and July 30-31, 1975. A diel synoptic study was made in the Mill Creek drainage basin July 31-August 1, 1974.

Data Collected

Data collected during the synoptic studies include rainfall quantity and quality (winter only), stream stage and discharge, water temperature, pH, total alkalinity, specific conductance, and dissolved-oxygen concentration. Samples of rain (winter only) and stream water were collected and prepared for laboratory analysis of turbidity, suspended-sediment concentration and particle-size distribution, bedload particle-size distribution, concentrations of major dissolved solids, selected trace elements, nitrogen and phosphorus compounds and organic carbon, bacteria, and seston. The frequency of collection varied for each group of constituents. The 16 synoptic stations and some of their features are listed in table 1.

Physical Features

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s Drainage basins were selected for study because of their importance to park resources or because of their different stages in the timber harvest and regeneration cycle. The small drainage basin of Geneva Creek was included in this study at the request of Arcata Redwood Co. The physical features chosen to characterize these drainage basins are explained below.

Drainage areas for the synoptic stations were measured on published 1:24,000 (where available) and 1:62,500 topographic maps, using a compensating polar planimeter. Drainage-basin aspect is the compass direction, downstream, of a straight line that passes through the stream sampling site and divides the basin into approximately equal parts.

Altitude was determined from topographic maps that had a 50-ft (15-m) contour interval. Relief is the difference in altitude between the highest and lowest points in the basin. Relief ratio (Schumm, 1956, p. 612) is the ratio of drainage-basin relief to the length of a straight line from the drainage-basin mouth to the highest point on the drainage basin boundary.

Hypsometric curves indicate the proportions of a drainage basin at various altitudes above the mouth of the basin. These curves (not included in this report) are obtained by plotting the relative height (altitude of a given contour above the basin mouth divided by the total basin relief) against the relative area (area in basin above a given contour divided by total drainage area). Drainage basins characterized by large areas under their hypsometric curves tend to have low-gradient slopes adjacent to their drainage divides and steep slopes adjacent to their principal stream channels; conversely, drainage basins characterized by small areas under their curves tend to have low-gradient slopes adjacent to their principal stream channels and steep slopes adjacent to their basin boundaries. Scott and Williams (1974, p. 27) and Tatum (1965, p. 886) have used the relative height at the point on the hypsometric curve where the relative area equals 0.5 as a simple index of the distribution of land surface within a basin. This ratio is called the hypsometric analysis index.

Average ground slope was determined using the line-intersection method of Wentworth (1930) and then checking the results with the Finesterwalder method (Wentworth, 1930, p. 184). No large or systematic differences were detected between the two methods. The values obtained by the line-intersection method are the values presented in table 1, as they are considered the more reproducible values.

Drainage density is the quotient obtained by dividing the drainage area into the total length of all streams indicated by V-shaped inflections in contour lines as well as by blue lines on 1:62,500 scale topographic maps having a 50-ft (15-m) contour interval. Drainage densities for all tributary basins were determined by measuring the scale length of the streams with a map wheel and checking the results by the line-intersection method of Mark (1974); no significant or systematic differences were noted between methods. Drainage densities for the Redwood Creek stations at South Park Boundary and at Orick were determined solely by the line-intersection methods.

Average stream gradients were obtained by dividing the difference in altitude between the channel mouth and the highest recognizable point along the main channel by the distance between those points measured along the channel. The stream gradient immediately upstream from the sampling station was determined from the downstream-most reach of uniform gradient on a semilog plot of the stream profile (Hack, 1973, p. 421).

Stream orders were assigned according to the numbering system of Strahler (1957, p. 914). Using a map on which all intermittent and perennial stream channels are shown, the smallest tributaries are assigned as first order. Where two first-order channels meet, a second-order channel is formed; where two second-order channels meet, a third-order channel is formed, and so forth. Given a sample of sufficient size on homogeneous terrain, stream order will on the average be directly proportional to the drainage area, channel dimensions, and stream discharge at that point.

The elongation ratio of a drainage basin is the ratio of the diameter of a circle of the same area as the basin to the maximum length of the basin measured in the direction of the basin aspect.

The numeric key and distinctive physical characteristics of soil series (table 2) are based on information from legends accompanying soil-vegetation maps (Alexander and others, 1959-1962; U.S. Forest Service, undated). The land-use categories were determined by inspection of black and white vertical aerial photographs, scale 1:24,000, taken August 1975.

The physical significance of these and similar parameters in determining flood discharges and sediment yields has been discussed by Anderson (1954, 1957, 1970), Wallis (1965), Lustig (1965), and Scott and Williams (1974).

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Nonsynoptic

To obtain data from drainage basins that show a wide range of physical characteristics and land use, nonsynoptic observations were made at 24 stations in the Redwood Creek drainage basin (fig. 2). Nonsynoptic data were collected whenever possible under a wide range of hydrologic conditions. While unrelated to specific short-term hydrologic events, nonsynoptic sampling was conducted during the receding flows of spring, the low flows of summer and autumn, and the high flows of winter. Nonsynoptic measurements and data collections were also made at 16 synoptic (figs. 2 and 4) and 13 Redwood Creek estuary sampling stations (fig. 3).

Data Collected

Data measurements and sample collections for nonsynoptic studies included stream stage and discharge; turbidity; suspended-sediment concentration and particle-size distribution; bedload discharge and particle-size distribution (when applicable); particle-size composition of streambed materials; onsite water-quality measurements of temperature, pH, total alkalinity, specific conductance, and dissolved-oxygen concentration; collection and filtration of water samples for laboratory analysis of major dissolved solids, selected trace elements, nitrogen and phosphorus compounds, and organic carbon; collection of stream-bottom sediments for laboratory analysis of organic carbon and pesticides; bacteria; benthic invertebrates; fish; periphyton; phytoplankton; and seston. The frequency of data collection varied for each parameter and for each station. The nonsynoptic sampling stations and some of their features are listed in table 3.

Physical Features

The physical features of the drainage basins selected for nonsynoptic observations (table 3) were determined in the same way as for the synoptic basins except that the channel gradients immediately upstream from stations along Redwood Creek were determined only from the contour intersection closest to the station. A large uncertainty is associated with these gradients because of the large contour interval and recent channel aggradation and (or) scour.

TABLE 1.--Station and drainage basin descriptions for synoptic sampling stations

[See figures 2 and 4 for location of sampling stations and table 2 for physical properties of soil series]

TABLE 1.--Station and drainage basin descriptions for synoptic sampling stations--Continued

Station description			Drainage basin description									
Number and name	Latitude	Longitude	Area (mi ²)	Aspect (direc- tion)	Altitude (ft)			Relief ratio (ft/ft)	Area under hypsometric curve (in ²)	Hypsometric analysis index	Average ground slope (degrees)	
					Average	Range	Relief					
11532602 West Branch Mill Creek below Red Alder campground near Crescent City	41°42'11"	124°06'04"	6.90	NW	1,060	340- 2,225	1,885	.10	10.97	.40	20	.37
11532605 West Branch Mill Creek at Bridge near Crescent City	41°43'50"	124°06'16"	10.8	NW	940	235- 2,225	1,990	.08	9.72	.36	19	.35
11532610 East Fork Mill Creek near Crescent City	41°43'51"	124°05'20"	16.1									
11532615 East Fork Mill Creek at Bridge near Crescent City	41°43'56"	124°05'41"	16.7	W	1,190	230- 2,330	2,100	.10	10.47	.46	20	.37
11532620 Mill Creek near Crescent City	41°44'32"	124°06'06"	28.6	NW	940	190- 2,330	2,140	.09	10.32	.39	19	.35
11532626 Mill Creek at Bridge near Crescent City	41°46'28"	124°05'54"	35.1	NW	940	130- 2,330	2,200	.07	9.48	.34	19	.34
11532630 Mill Creek at mouth near Crescent City	41°47'29"	124°05'01"	37.0	NW	810	70- 2,330	2,260	.06	9.93	.36	18	.33

¹Ratio measured along stream channel axis.

TABLE 1.--Station and drainage basin descriptions for synoptic sampling stations--Continued

Station number and name	Drainage density (mi/mi ²)	Stream gradient				Stream order	Elongation ratio	Soil series				History of land use ² (percentage of area)		
		Average (ft/mi)	(ft/ft)	Immediately upstream from station (ft/mi)	(ft/ft)			Identification number	Percent age of area	Identification number	Percent age of area	Logged since establishing park	Logged prior to establishing park	Virgin and advanced second growth
11482200 Redwood Creek at South Park Boundary, near Orick	4.8	98	0.019	24	0.004	6	0.43	821 812 849 813/821 816 700 752	30 20 8 4 4 3 3	812/823 821/816 823 835 840 849/823 Other	3 3 3 3 3 2 12	<5	65	>30
11482225 Harry Wier Creek near Orick	7.9	766	.145	406	.077	4	.72	812 814 812/814 835	62 12 10 6	821 840 813 1	5 4 1	40	-	60
11482250 Miller Creek near Orick	5.3	1,093	.207	587	.111	3	1.02	812 814	86 8	835	6	90	-	10
11482260 Miller Creek at mouth, near Orick	5.7	1,057	.200	1,760	.333	3	.70	812 813	72 15	814 821	7 6	77	-	23
11482330 Hayes Creek near Orick	7.6	1,250	.237	812	.154	3	.78	812/814 814	64 31	813	5	-	4	96
11482450 Lost Man Creek near Orick	6.5	547	.103	72	.014	4	.68	812/814 812 915g	51 27 11	814 814/915g	10 1	-	87	13
11482468 Little Lost Man Creek at Site No. 2, near Orick	6.2	398	.080	280	.050	4	.52	812/814 814	67 30	915g 818	2 1	-	6	94
11482475 Geneva Creek near Orick	5.9	1,280	.242	1,760	.333	2	.61	814	90	812/814	10	-	100	-

TABLE 1.--Station and drainage basin descriptions for synoptic sampling stations--Continued

Station number and name	Drainage density (mi/mi ²)	Stream gradient				Stream order	Elongation ratio	Soil series				History of land use (percentage of area)			
		Average (ft/mi)	(ft/ft)	Immediately upstream from station (ft/mi)	(ft/ft)			Identifi- cation number	Percent- age of area	Identifi- cation number	Percent- age of area	Logged as of 1974	Advanced growth	Prairie or cleared area	Virgin area
11532602 West Branch Mill Creek below Red Alder Camp-ground, near Crescent City	7.75	340	.064	63	0.012	5	0.69	814 812/814 812 815	50 20 18 5	700 200 871/872	3 2 2	39	17	0	44
11532605 West Branch Mill Creek at bridge near Crescent City	8.61	240	.045	18	.003	5	.59	814 812/814 812 200	53 20 14 6	815 700 Others	3 2 2	24	47	1	26
11532615 East Fork Mill Creek at bridge, near Crescent City	7.32	235	.045	30	.006	6	.74	814 815/812 815 814/812 812 871 813	25 16 9 8 7 7 3	920 200 813/816 814/815 Others Unmapped	3 3 2 2 4 11	48	1	4	47
11532620 Mill Creek near Crescent City	7.28	200	.038	33	.006	6	.77	814 814/812 812 815/812 815 200	36 11 10 9 7 5	871 640 920 813 Others Unmapped	5 5 2 2 2 6	38	20	3	39
11532626 Mill Creek at bridge, near Crescent City	7.28	145	.027	16	.003	6	.85	814 814/812 812 815/812 815 200	40 13 9 7 6 5	871 920 813 Others Unmapped	3 3 2 7 5	32	18	2	48
11532630 Mill Creek at mouth, near Crescent City	7.29	130	.025	31	.006	6	.80	814 814/812 812 815/812 815 200	41 12 9 7 6 5	920 871 400 Others Unmapped	4 3 2 6 5	30	19	2	49

²History of land use as of August 1975.

TABLE 2.--Physical properties

[Soil series from Alexander and others (1959-62)]

Soil series		Depth range (in)	Color of surface/subsoil	Reaction of surface/subsoil
Identifi- cation number	Name			
200	Unclassified secondary soils on bottom lands			
400	Unclassified secondary soils on terraces and benchlands			
700	Miscellaneous land types including colluvium, rock outcrop, active alluvium, talus,			
752	Yorkville	30-60	Grayish brown/ gray	Slightly acid/ alkaline
812	Hugo	30-60	Grayish brown/ pale brown	Slightly acid/ strongly acid
813	Orick	40-70	Brown/ strong brown	Moderately acid/ strongly acid
814	Melbourne	30-60	Brown/ strong brown	Moderately acid/ strongly acid
815	Josephine	30-60	Brown/ reddish yellow	Slightly acid/ moderately acid
816	Sites	30-60	Reddish brown/ red	Moderately acid/ strongly acid
818	Usal	30-60	Dark grayish brown/ light yellowish brown	Slightly acid/ strongly acid
821	Masterson	30-60	Brown/ light yellowish brown	Moderately acid/ strongly acid
823	Atwell	36-72	Dark grayish brown/ pale brown	Slightly acid/ strongly acid
835	Kneeland	18-40	Dark grayish brown/ pale brown	Strongly acid/ strongly acid
840	Wilder	26-50	Very dark grayish brown/ light yellowish brown	Very strongly acid/ very strongly acid
849	Tyson	18-48	Dark grayish brown/ pale brown	Slightly acid/ moderately acid
871	Los Gatos	12-36	Brown/ brown (near reddish brown)	Slightly acid/ slightly acid
872	Maymen	4-16	Pale brown/ pale brown	Slightly acid/ slightly acid
915	Mendocino	40-90	Brown/ reddish yellow	Slightly acid/ strongly acid
915g	Mendocino (conglomerate)	60+	Brown/ reddish brown	Moderately acid/ strongly acid
920	Empire	40-70	Brown/ yellowish brown	Moderately acid/ strongly acid

properties of soil series

(1959-60)

[See tables 1 and 3 for occurrence of soil series]

of soil	Nature of surface/subsoil	Parent material	General drainage	Erosion hazard	Estimated suitability	
					Timber production	Extensive range use
IVium, talus and landslides with highly variable properties						
d/	Clay loam/ clay	Metamorphosed rocks	Imperfect	Moderate	Unsuited	Medium to very high
d/d	Gravelly loam/ stony clay loam	Sandstone and shale	Good to excessive	Moderate to very high	Moderate to very high	Medium to low
cid/d	Loam/ clay loam	Schistose sedimentary rocks	Good	Moderate	Medium to very high	Medium
cid/d	Loam/ clay loam	Sandstone and shale	Good	Moderate	High to very high	Medium
d/cid	Loam/ clay loam	Sandstone and shale	Good to excessive	Very high	High to very high	Medium
cid/d	Clay loam/ clay	Schistose sedimentary rocks	Good	Moderate	Variable	Medium
d/d	Loam/ clay loam	Sandstone and shale	Good	Moderate	High	Medium to high
cid/d	Loam/ gravelly loam	Schistose sedimentary rocks	Good to excessive	Moderate to very high	Medium to very high	Medium-low
d/d	Loam/ gravelly clay loam	Sheared sedimentary rocks	Imperfect	Moderate to very high	High to very high	Medium
d/d	Clay loam/ clay loam	Sandstone and shale	Good	Moderate to high	Unsuited	High
y acid/ y acid	Sandy loam/ gravelly sandy loam	Sandstone	Good to excessive	High to very high	Variable	Low to very low
d/cid	Gravelly loam/ very gravelly loam	Sandstone and shale	Good to excessive	High to very high	Medium to low	Medium to very low
i/i	Gravelly clay loam/ gravelly clay loam	Sandstone and shale	Good to excessive	High	Unsuited	Very low
i/i	Gravelly loam/ gravelly loam	Sandstone and shale	Excessive	High	Unsuited	Very low
i/i	Loam/ clay	Soft sedimentary rocks	Good	Moderate	High	Medium
cid/i	Loam/ clay loam	Soft sedimentary rocks	Good	Moderate	Variable	Medium
cid/i	Loam/ clay loam	Soft sedimentary rocks	Good	Moderate to high	High to very high	Medium

TABLE 3.--Station and drainage basin descriptions for nonsynoptic sampling stations

[See figures 2 and 3 for location of sampling stations and table 2 for physical properties of soil series]

	Number and name	Station description		Area (mi ²)	Aspect (direc- tion)	Drainage basin description			Relief ratio (ft/ft)	Area under hypsometric curve (in ²)	Hypsometric analysis index	Average ground slope (degrees)
		Latitude	Longitude			Average	Range	Relief				
11481500	Redwood Creek near Blue Lake	40°54'22"	123°48'51"	67.6	NNW	3,030	860-5,300	4,440	1.05	7.54	0.47	12.4
11482020	Redwood Creek at Redwood Valley Bridge, near Blue Lake	40°57'48"	123°50'20"	95.9	NNW	2,780	725-5,300	4,575	1.04	6.95	.43	14.0
11482110	Lacks Creek near Orick	41°03'39"	123°51'57"	17.0	NNW	-	480-4,100	3,620	1.08	7.70	.50	18.3
11482120	Redwood Creek above Panther Creek, near Orick	41°05'21"	123°54'23"	150	NNW	2,500	390-5,300	4,910	1.03	6.56	.41	16.2
11482140	High-Slope Schist Creek near Orick	41°07'25"	123°56'51"	.53	SE	1,720	750-2,645	1,895	.36	7.74	.50	20.8
11482160	Copper Creek near Orick	41°08'58"	123°55'53"	2.78	W	1,920	290-3,090	2,800	.19	8.33	.57	18.8
11482190	Slide Creek near Orick	41°10'19"	123°56'49"	1.16	WSW	1,810	225-2,510	2,285	.29	9.80	.69	21.3
11482210	Bridge Creek near Orick	41°11'32"	123°58'52"	11.6	N	1,520	140-2,820	2,680	1.08	7.70	.50	18.3
11482220	Redwood Creek above Harry Wier Creek, near Orick	41°11'50"	123°59'30"	202	NNW	2,250	125-5,300	5,175	1.03	5.31	.38	14.0
11482230	Tom McDonald Creek near Orick	41°12'16"	124°00'53"	6.86	NE	1,360	120-2,820	2,700	.16	6.94	.45	18.8
11482240	Fortyfour Creek near Orick	41°13'15"	124°00'44"	3.09	ENE	920	90-1,825	1,735	.11	7.40	.46	18.8
11482270	Bond Creek near Orick	41°14'02"	124°01'14"	1.37	E	920	80-1,400	1,320	.15	9.42	.62	15.6
11482280	Cloquet Creek near Orick	41°14'42"	124°00'37"	1.14	W	1,250	80-2,050	1,970	.24	8.87	.59	20.3
11482290	Oscar Larson Creek near Orick	41°15'23"	124°00'30"	.69	W	1,280	70-1,950	1,880	.29	9.80	.64	18.8
11482295	Gans South Creek near Orick	41°15'46"	124°00'49"	.52	SW	980	70-1,950	1,880	.29	9.29	.61	18.3
11482300	Elam Creek near Orick	41°15'49"	124°01'29"	2.49	NE	1,040	60-1,400	1,340	.10	10.49	.74	13.5
11482305	Gans West Creek near	41°16'30"	124°01'32"	.27	WSW	1,220	50-1,800	1,800	.28	9.91	.67	17.5

¹Ratio measured along stream channel axis.

TABLE 3.--Station and drainage basin descriptions for nonsynoptic sampling stations--Continued

Station number and name	Drainage density (mi/mi ²)	Stream gradient				Stream order	Elongation ratio	Soil series				History of land use (percentage of area)		
		Average (ft/mi)	(ft/ft)	Immediately upstream from station (ft/mi)	(ft/ft)			Identification number	Percent age of area	Identification number	Percent age of area	Logged since establishing park	Logged prior to establishing park	Virgin and advanced second growth
11481500 Redwood Creek near Blue Lake	8.8	165	0.031	26	0.05	5	0.60	821 812 849 840	45 13 11 5	816 849/823 815/821 Other	5 2 2 17	<5	>55	40
11482020 Redwood Creek at Redwood Valley Bridge, near Blue Lake	8.6	142	.027	28	.05	5	.53	821 812 849 816 840	37 16 10 5 4	823 849/823 821/816 Other	3 2 2 21	<5	>60	35
11482110 Lacks Creek near Orick	9.1	302	.06	86	.02	5	.63	812 812/823 823 849	64 7 6 6	700 849/823 Other	5 2 10	10	40	50
11482120 Redwood Creek above Panther Creek, near Orick	8.5	99	.019	21	.04	6	.46	821 812 849 816 823 812/823	31 22 7 4 4 4	840 813 752 835 760 Other	3 3 3 2 2 15	<5	>60	35
11482140 High-Slope Schist Creek near Orick	7.3	1,552	.29	2,000	.38	2	.38	821 813/821	71 22	821/813	7	-	-	100
11482160 Copper Creek near Orick	7.8	951	.18	400	.08	4	.67	821 835/855 840/835 849	57 9 9 8	812/823 835 849/823 Other	7 4 3 3	20	30	45
11482190 Slide Creek near Orick	7.3	1,351	.26	400	.08	3	.77	812 835 823 840/835	74 11 8 2	840 812/823 835/855	2 2 1	30	40	30
11482210 Bridge Creek near Orick	4.8	318	.06	80	.04	4	.72	821 813 821/813 816	44 23 14 6	813/816 813/821 Other	5 4 4	21	55	24
11482220 Redwood Creek above Harry Wier Creek, near Orick	8.0	85	.016	16	.03	6	.42	821 812 849 813 816 823	30 20 6 6 4 4	835 752 812/823 840 813/821 Other	3 3 3 2 2 1	5	60	35

Wier Creek,
near Orick

812	20	752	3
849	6	812/823	3
813	6	840	2
816	4	813/821	2
823	4	Other	13
821/813	4		

11482230 Tom McDonald Creek near Orick	4.8	370	.07	100	.02	4	.79	813 821 821/813 813/816	28 20 16 15	813/821 816/813 816	14 5 2	6	80	14
11482240 Fortyfour Creek near Orick	6.6	552	.10	133	.03	3	.67	813/821 813 821	55 38 4	823 816	2 1	20	75	5
11482270 Bond Creek near Orick	7.5	727	.14	800	.15	3	.79	813 813/821 813/914 821	67 16 7 4	813/816 914/813 816	2 2 2	27	55	18
11482280 Cloquet Creek near Orick	6.1	1,161	.22	500	.09	2	.74	812 814	54 22	813 Other	20 4	55	-	45
11482290 Oscar Larson Creek near Orick	8.9	1,496	.28	1,200	.23	3	.68	812 813	80 19	814/812	1	23	-	77
11482295 Gans South Creek near Orick	5.2	1,435	.27	700	.13	3	.63	812	67	813	33	-	-	100
11482300 Elam Creek near Orick	7.2	474	.09	400	.08	3	.78	813 813/914	78 17	914/813 813/816	3 2	40	30	30
11482305 Gans West Creek near Orick	1.7	1,561	.30	450	.09	2	.50	813 812	57 38	818	5	-	-	100
11482310 McArthur Creek near Orick	7.3	249	.05	3,000	.57	3	.51	813 813/914 200	82 8 5	821 Other	3 2	30	45	25
11482320 Low-Slope Schist Creek near Orick	5.2	1,276	.24	800	.15	2	.52	813	100			-	-	100
11482455 Lost Man Tributary near Orick	4.1	1,288	.24	600	.11	2	.60	814/816 814	61 36	815	3	-	-	100
11482460 Larry Damm Creek near Orick	8.1	498	.09	107	.02	3	.55	920 814/812	70 27	915 Other	2 1	-	70	30
11482470 Little Lost Man Creek near Orick	5.3	349	.066	310	.06	4	.46	812/814 814	64 33	915g 818	2 1	-	8	92
11482480 Berry Glen Creek near Orick	10.0	1,379	.26	400	.02	2	.76	814 823 813/812/814	59 27 12	821/823	2	-	100	-
11482500 Redwood Creek at Orick	7.7	71	.013	8	.02	6	² .38 .34	821 812 813 920 849 816 823 813/821 812/823	22 18 11 5 4 3 3 3 3	814 840 835 915 814/812 821/813 813/816 Other	2 2 2 2 2 2 2 14	10	50	40

SUMMARY OF DATA COLLECTION

Data represented by the various physical, chemical, and biological measurements and analyses were selected because of their significance in evaluation of the ecosystem. Methods of data collection are those of the Geological Survey or other established procedures, adapted where necessary to accommodate circumstances. Summaries of data collection are presented in graphic or tabular form.

Physical Data

Channel Cross Sections

Changes in stream-channel morphology provide a simple direct measure of channel scour, aggradation, and streambank erosion (Emmett, 1974). This information is particularly useful in that it helps assess the potential to topple or bury riparian vegetation and the stability of aquatic environments. Some changes in stream-channel morphology accompany natural changes in type of alluvial bedforms and lateral channel migration. The dominant channel dimensions in alluvial reaches, however, are closely adjusted to prevailing stream discharge and sediment load (Leopold and others, 1964). Major modifications in cross-sectional area, width-depth ratio, or streambed altitude usually result from changes in runoff regime or sediment load. These changes in turn may reflect altered drainage basin conditions due to major floods or land-use changes.

Changes in the Mill Creek stream channel are shown in table 4. Changes in the Redwood Creek stream channel at cross sections are published in Nolan and others (1976b).

All surveyed stream-channel cross sections were established with 4.0-ft (1.2-m) lengths of 3/8-in (9.5-mm) steel bars. Steel monuments were driven 3 to 3.5 ft (0.9 to 1.1 m) into the ground and were referenced to at least two other triangulation points (Emmett, 1974). Triangulation was done by tape and compass. A self-leveling level was used to establish relative altitudes. Photographs and information on bedforms, grain-size of streambed material, and specific erosional and depositional features were obtained while surveying to assist in the interpretation of any observed cross-sectional changes.

Changes in topographic profiles between established end points of 10 stream-channel cross sections along Mill Creek have been determined by repeated level surveys. The results of repetitive stream-channel cross-section surveys through August 1975 are summarized in table 4 and figure 5. The net changes are those associated with the 1974-75 storm season. Cross-section locations are indicated in figure 4 by use of their field identification number.

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TABLE 4.--Summary of changes in Mill Creek stream channel at cross sections

[Location of cross sections shown in figure 4. Symbols are explained in figure 5. Cross section 7 was resurveyed in January 1976. All other cross sections were resurveyed in August 1975]

Measurements	Cross-section identification numbers									
	1	2	3	4	5	6	7	8	9	10
Change in altitude of thalweg (ft)										
Aggradation	0.1	0	0.2	0.9	0	0	0	0.2	1.7	0
Scour	0	1.3	0	0	.6	.1	0	0	0	2.5
Net change in cross-sectional area (ft^2) associated with changing streambed altitude										
Aggradation (Aa)	0	0	37.0	33.4	0	5.1	2.0	7.0	45.2	0
Scour (As)	.1	11.2	0	0	12.4	0	0	0	0	49.1
At left bank										
Change in width (ft)										
Deposition (Wd)	0	0	0	0	0	0	0	0	0	0
Recession (Wr)	0	0	0	0	0	0	0	0	1.0	0
Change in area (ft^2)										
Deposition (Ad)	0	0	0	0	0	0	0	0	0	0
Recession (Ar)	0	0	0	0	0	0	0	0	1.5	0
At right bank										
Change in width (ft)										
Deposition (Wd)	0	0	0	0	0	1.0	1.0	0	12.5	0
Recession (Wr)	1.9	0	0	0	0	0	0	0	0	3
Change in area (ft^2)										
Deposition (Ad)	0	0	0	0	0	3.5	.8	0	17.8	0
Recession (Ar)	6.1	0	0	0	0	0	0	0	0	6.6
Net change in area (ft^2)	+6.2	+11.2	-37.0	-33.4	+12.4	-8.6	-2.8	-7.0	-51.5	+55.7

¹Deposition was the result of colluvial deposits.

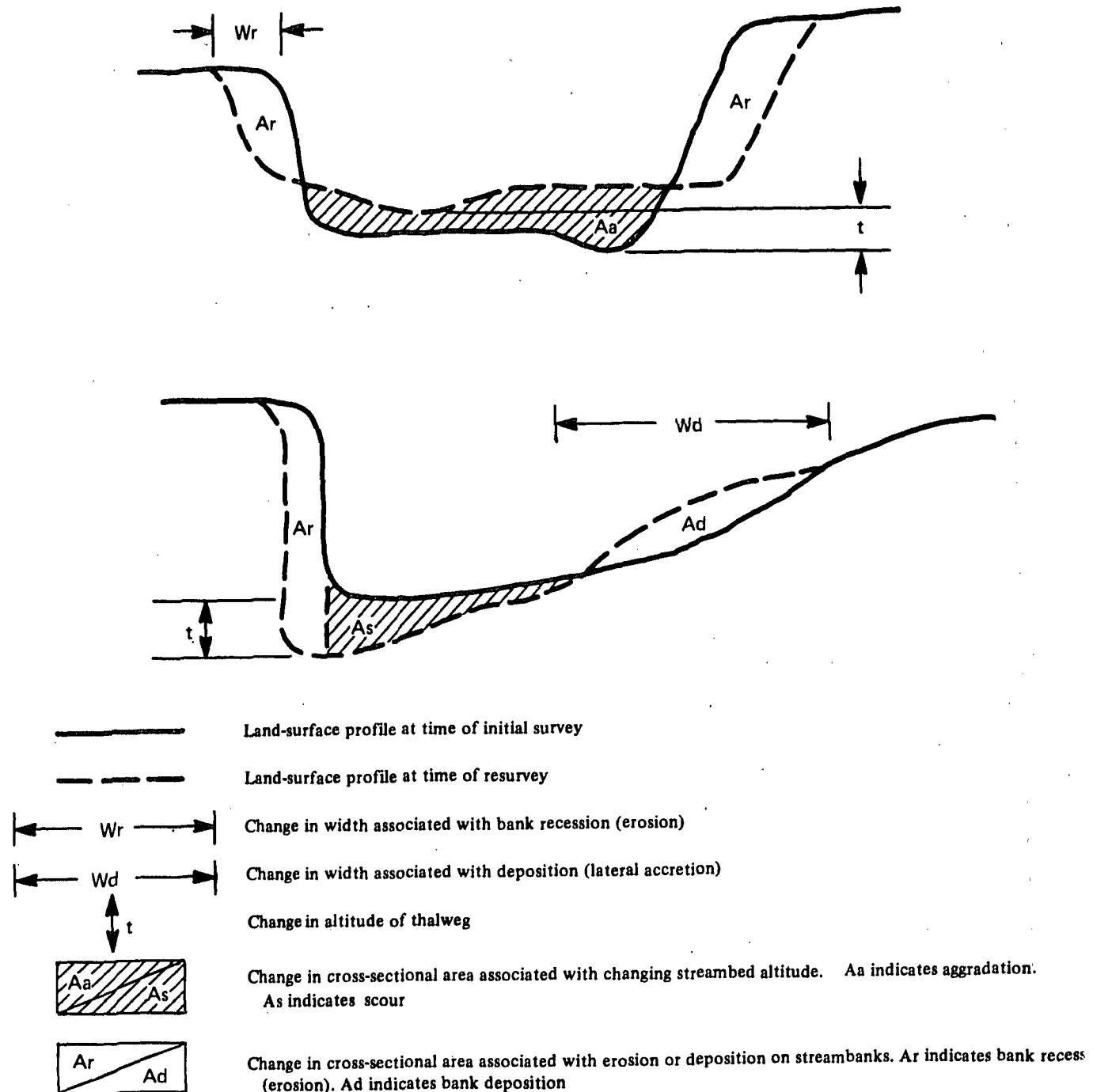


FIGURE 5.--Changes in stream channel.

Erosional Landforms--Mill Creek Drainage Basin

The erosional landforms map (fig. 6) and related data (table 1) were compiled to summarize and compare the erosional characteristics of the Mill Creek drainage basin. These erosional landforms are major sources of stream-sediment loads. Smaller landforms, such as rills, roadside ditches, small individual slumps, and eroding streambanks were not mapped although they also are major sources of stream sediment. Eroding streambanks occur throughout the basin. Other forms of small-scale fluvial erosion are more prevalent in recently logged areas than in the uncut forest.

The erosional landforms (fig. 6) occurring in the western one-half of the Mill Creek drainage basin were identified using a magnifying stereoscope on 1:10,000 black and white vertical aerial photographs taken in September 1975. Erosional landforms occurring in the remaining parts of the drainage basin were identified using a magnifying stereoscope on 1:10,000 black and white vertical aerial photographs taken in August 1972, and updated using 1:32,500 black and white aerial photographs taken in April 1974. Identified erosional landforms were transferred to 1:62,500 topographic base maps using the topography and scaled distances from known reference points. Scale limitations restrict graphic portrayal to large mass movement features and large gullies.

The mass-movement nomenclature is that used and explained by Nolan and others (1976a). All gullies and debris avalanches identified on the photographs were associated with timber harvest and related road activity.

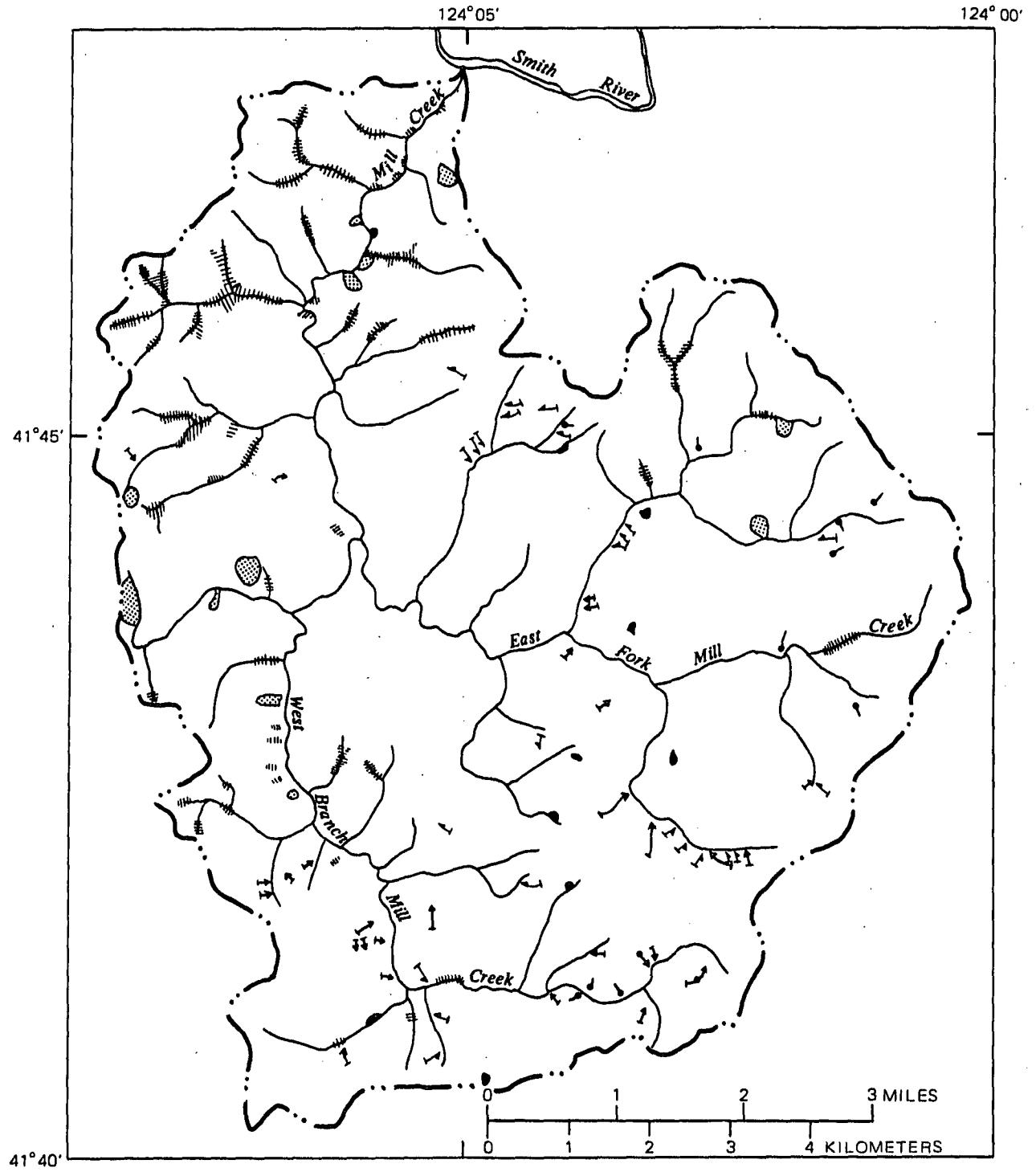


FIGURE 6.--Erosional landforms, Mill Creek drainage basin.

EXPLANATION

- GULLIES -- All man caused.
- DEBRIS AVALANCHES -- All associated with man-related activities
- AREA CHARACTERIZED BY ACTIVELY ERODING STREAM BANKS AND (OR) UNSTABLE
ADJACENT HILL SLOPES -- Small-scale slides, slumps, debris avalanches,
and gullies are abundant
- SLIDES -- Mostly debris slides. Some block slides, rock falls,
slumps, and slump flows
- OLD SLIDES THAT APPEAR TO BE DORMANT AND AREAS OF UNCERTAIN SLOPE
STABILITY
- SMALL-SCALE MASS MOVEMENT FEATURES
- DRAINAGE BASIN BOUNDARY
- Some smaller features which cannot be accurately mapped at this scale are
slightly exaggerated

FIGURE 6.--Erosional landforms, Mill Creek drainage basin--Continued.

Rainfall

The amount, intensity, and seasonal distribution of rainfall within a given drainage basin are prominent factors in determining the type and density of vegetational cover and the types and rates of weathering and erosional processes. Among the factors that determine the quantity and rate of stream runoff during individual storms are antecedent rainfall and the amount and intensity of rainfall during the storm itself. In intricately dissected, high-relief terrain like the drainage basin of Redwood Creek, rainfall quantities and intensities show large variability. The rainfall-sampling program was designed to provide information about the rainfall-runoff relations during periods when synoptic samples were collected, and about orographic controls on precipitation in the lower half of the Redwood Creek drainage basin. A rainfall-sampling program was not designed for the Mill Creek drainage basin.

Rainfall was collected in twenty-two 11-in (280-mm) capacity storage rain gages and three recording float-type 24-in (610-mm) capacity rain gages (fig. 2). The 22 storage rain gages were mounted vertically without wind shields and in the open except for Harry Wier Creek, Miller Creek, Miller Creek at mouth, and Lost Man Creek. These four gages were located within old-growth redwood forest. In addition, published daily rainfall values from the standard storage rain gage operated by the U.S. National Oceanic and Atmospheric Administration (1974-75) at Prairie Creek Redwoods State Park were used. Gages at synoptic stream-sampling stations were read approximately hourly during periods of intensive winter-storm sampling. The limited capacity of the gages and infrequent servicing of gages at remote stations resulted in some gages overflowing during periods of exceptionally intense rainfall. Some gages were equipped with overflow collection vessels to prevent loss of record from overflow.

Storage rain gages in different locations were rarely read on the same day, rendering comparisons between gages difficult. The rainfall amounts shown in table 5 indicate the accumulated rainfall stored in the gages since the preceding measurement. To simplify comparison, monthly totals have been computed by estimating the quantity of rain that fell between observations and the end of the month. These estimates are based on correlations with rainfall records from the recording gages at Minor Creek, Klamath-Korbel Road, Elk Camp, and the storage gage at Prairie Creek Redwoods State Park. The percentage of the monthly total rainfall based on these correlations is indicated to provide some indication of the reliability of these values.

TABLE 5.--

[All rain gages are storage type. See figure 2 for location of stations.
> indicates rainfall exceeded storage capacity and gage overflowed.

Month	Accumulated rainfall, in inches (upper number, if entered, is time of measurement)																
	Day																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
STATION A PRAIRIE CREEK STATE PARK																	
Oct., 1974	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nov.	0	0	0	0	0.02	0	1.01	0	0.18	0.21	T	0	0	0	0	0	0.17
Dec.	0	0.75	1.27	0.96	T	0.10	.02	0	.03	T	1.38	0.65	0.41	2.94	0.13	T	.50
Jan., 1975	0.02	0	.27	.74	1.94	.82	.76	.85	.40	1.23	.01	0	0	0	0	0	0
Feb.	1.19	.51	.31	1.47	.45	T	.50	.30	1.36	.52	.36	.94	1.31	.25	0	.22	0
Mar.	.12	.98	0	0	T	T	.30	1.57	.07	.30	.02	0	.20	T	.42	1.48	1.45
Apr.	0	.19	.95	.89	.03	0	.22	.20	0	0	0	0	0	.50	0	0	0
May	0	0	1.37	.04	0	0	0	0	0	.53	.18	0	0	.02	0	0	0
June	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
July	.13	0	0	0	0	0	0	0	.02	0	0	0	0	0	.05	0	0
Aug.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.30	.07
Sept.	0	0	0	0	0	0	0	0	0	0	0	0	0	T	0	.02	0
11482475 GENEVA CREEK NEAR ORICK																	
Oct., 1975	S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nov.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dec.	--	--	--	--	2030	3.23	--	--	--	1155	--	--	--	--	--	--	--
Jan., 1975	--	1200	--	--	--	--	--	--	--	--	--	--	1100	--	1800	--	--
	--	211.45	--	--	--	--	--	--	--	--	--	--	1.54	--	.00	--	--
Feb.	--	--	--	--	--	--	--	--	--	--	--	2330	2200	0800	--	--	--
Mar.	--	--	--	--	--	--	--	--	--	--	--	3.16	.54	.05	--	--	--
Apr.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
May	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
June	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
July	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sept.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.--

Rainfallstations.
owed.

[S indicates start of record. T indicates trace of rainfall.
 [solid line indicates missing record]

Month	16	17	Accumulated rainfall, in inches (upper number, if entered, is time of measurement)													Monthly total based on correlation		
			18	19	20	21	22	23	24	Day	26	27	28	29	30	31		
STATION A PRAIRIE CREEK STATE PARK--Continued																		
Oct.	0	0	0	0	0	0	0	0	0	0	0.50	2.44	0.01	T	T	2.95	0	
Nov.	0	0.17	0.75	0.07	0	1.27	0	0	0	1.05	0	.26	0	0	0	--	4.99	0
T	.59		.02	T	T	.63	0.23	0	0	0	0.15	2.20	0	0	0.34	12.40	0	
Dec.	0	0	0	0	0	0	0	0	0	.15	.70	0	.20	0	0	.90	8.80	0
Jan.	.22	0	.64	3.01	0.62	.37	0	0	0	0	0	.50	0	--	--	14.83	0	
Feb.	1.48	1.45	5.12	.73	.10	.74	.83	0.74	0.86	1.51	0	0	0	0	0	17.54	0	
Mar.	0	0	0	0	0	T	.41	1.44	.69	0	0	0	0	0	--	5.87	0	
Apr.	0	0	T	0	0	0	0	0	0	0	0	0	0	0	0	2.14	0	
May	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	--	.29	0
June	0	0	0	0	0	0	T	.29	0	0	0	0	0	0	0	--	.29	0
July	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.01	.21	0
Aug.	-.30	.07	0	0	0	0	0	0	0	0	0	0	.60	0	0	0	.97	0
Sept.	-.02	0	0	0	0	0	0	0	0	0	0	0	0	0	--	.02	0	
11482475 GENEVA CREEK NEAR ORICK--Continued																		
Oct., 1974	--	--	--	--	--	--	--	--	--	1200					>2.5	0		
										2.52								
Nov.				2400	0900											--		
				3.48	.00													
Dec.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4.34	--		
Jan., 1975																	--	
Feb.																--	--	
March																--	--	
April																--	--	
May																--	--	
June																--	--	
July																--	--	
Aug.																--	--	
Sept.																--	--	

TABLE 5.--

Month	Accumulated rainfall, in inches (upper number, if entered, is time of measurement)																
	Day																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
11482468 LITTLE LOST MAN CREEK AT SITE NO. 2 NEAR ORICK																	
Oct., 1974	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nov.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dec.																	--
Jan., 1975																	--
Feb.	--	--	--	1500 3.31	2400 0.49	2400 T	2400 T	2400 0.50	1215 0.06	--	--	2330 3.66	2245 0.73	0825 0.06	--	--	--
Mar.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Apr.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
May	--	--	--	--	--	--	1425 1.49	--	--	--	--	--	--	--	--	--	
June	--	1400 0.80	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
July	--	--	--	--	--	--	--	--	--	1410 0.54	--	--	--	--	--	--	
Aug.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Sept.	--	1035 .00															
STATION B LOST MAN CREEK AT 18.5																	
Oct., 1974	8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Nov.	--	--	--	--	--	--	--	1.34	--	--	--	--	--	--	--	--	
Dec.	1625 1.58	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1215 9.15	
Jan., 1975	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1545 7.71	
Feb.	--	--	--	1030 4.19	1400 0.66	--	--	0830 1.27	--	--	1130 2.79	1415 1.04	0900 0.13	--	--	--	
Mar.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Apr.	--	--	--	--	--	--	1415 2.72	--	--	--	--	--	--	--	1000 2.13	--	
May	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
June	--	1040 .04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
July	--	--	--	--	--	--	--	--	--	1325 .44	--	--	--	--	--	--	
Aug.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Sept.	--	1530 .79															

5.--

Rainfall--Continued

5 17	Month	Accumulated rainfall, in inches (upper number, if entered, is time of measurement)													Percentage of monthly total based on correlation	
		18	19	20	21	22	23	24	25	26	27	28	29	30	31	
11482468 LITTLE LOST MAN CREEK AT SITE NO. 2 NEAR ORICK--Continued																
--	Oct., 1974	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
1215 9.15	Nov.	--	--	S	2200	0755	--	--	--	--	--	--	--	--	--	
	Dec.	--	--	--	1.46	0.00	--	--	--	--	--	--	--	--	--	
	Jan., 1975	--	--	--	--	--	--	--	--	--	--	--	3.90	--	--	
	Feb.	--	2100	3.43	--	--	--	--	--	--	--	1340	1452	--	--	
	Mar.	1500 9.07	--	--	--	--	--	--	--	--	--	0.97	2.31	--	--	
	Apr.	--	--	--	--	--	--	--	--	--	--	--	1430	12.9	2	
	May	--	--	--	--	--	--	--	--	--	--	--	5.27	--	0	
	June	--	--	--	--	--	--	--	--	--	--	--	--	6.2	0	
	July	--	--	--	--	1330 T	--	--	--	--	--	--	--	--	2.3	0
	Aug.	--	--	--	--	--	--	--	--	--	--	1200 0.78	--	--	.8	0
	Sept.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
STATION B LOST MAN CREEK AT 18.5--Continued																
	Oct., 1974	--	--	--	--	--	--	--	--	--	--	--	1630 2.69	--	2.8	4
	Nov.	--	--	1830 1.26	1545 1.26	0920 .18	--	--	--	--	--	--	--	--	5.5	8
	Dec.	--	--	--	--	--	--	--	--	--	--	--	3.98	13.1	0	
	Jan., 1975	--	--	--	--	--	--	--	--	--	--	--	1330 2.15	10.4	5	
	Feb.	--	--	--	--	--	--	1330 4.26	--	--	1300 .75	--	--	--	15.1	4
	Mar.	--	--	1530 16.30	1450 2.08	--	--	--	--	--	--	--	1045 4.70	23.5	0	
	Apr.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	May	--	--	--	--	--	--	--	--	--	--	--	--	2.2	0	
	June	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	July	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Aug.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	Sept.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

TABLE 5.--

Month	Accumulated rainfall, in inches (upper number, if entered, is time of measurement)																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
11482450 LOST MAN CREEK NEAR ORICK																	
Oct., 1974	S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nov.	--	--	--	--	--	2130	2230	0800	--	--	--	--	--	--	--	--	--
Dec.	1610	--	--	--	--	0.41	1.11	0.00	--	--	--	--	--	--	--	1305	
	1.52	--	--	--	--	--	--	--	--	--	--	--	--	--	--	8.32	
Jan., 1975	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1615	--
																10.33	--
Feb.	--	--	--	1105	2315	2300	2400	2400	0700	--	--	2400	2300	--	--	--	--
				3.95	0.50	0.00	0.00	.89	0.30			2.99	0.42	--	--	--	--
Mar.	--	--	--	--	--	--	--	--	--	1430	--	--	--	--	--	1130	
										3.33						9.80	
Apr.	--	--	1445	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			1.16														
May	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1030	
																2.04	
June	--	1300	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		0.02															
July	--	--	--	--	--	--	--	--	--	1335	--	--	--	--	--	--	--
										0.47							
Aug.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sept.	--	1610	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		.83															
STATION C FRESHWATER LAGOON																	
Oct., 1974	S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nov.	--	--	--	--	--	--	--	1725	--	--	1405	--	--	--	--	--	--
Dec.	1345	1440	--	--	--	--	--	.87	--	--	.22	--	--	--	--	--	--
	.93	.87															
Jan., 1975	8.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1600	
																3.68	
Feb.	--	--	0930	--	1030	--	--	--	1300	--	--	1055	--	1350	--	--	--
			1.39		1.30				.78			1.48		0.62			
Mar.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Apr.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
May	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
June	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
July	--	--	--	--	--	--	--	--	--	--	--	1240	--	--	--	--	--
												.35					
Aug.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sept.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.--

Rainfall--Continued

Month	Accumulated rainfall, in inches (upper number, if entered, is time of measurement)													Monthly total based on correlation		
	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
16	17															
11482450 LOST MAN CREEK NEAR ORICK--Continued																
--	--	Oct., 1974	--	--	--	--	--	--	--	--	1120 2.73	--	--	--	3.1	1
--	--	Nov.	--	--	2000 1.12	2400 1.18	1000 0.00	--	--	--	--	--	--	--	5.0	0
--	1305 8.32	Dec.	--	--	--	--	--	--	--	--	--	--	--	12	30	
1615 10.33	--	Jan., 1975	--	--	--	--	--	--	--	--	--	--	--	1400 1.78	9	44
--	--	Feb.	--	--	--	--	--	1230 4.15	--	--	1310 .73	--	--	--	13.5	3
--	1130 9.80	Mar.	--	--	1320 2.85	--	--	--	--	--	--	1100 4.26	--	20.2	0	
--	--	Apr.	--	--	--	--	--	--	--	--	1345 4.98	--	--	6.1	0	
--	--	May	--	--	--	--	--	--	--	--	--	--	--	2.1	0	
--	--	June	--	--	--	--	--	--	--	--	--	--	--	--		
--	--	July	--	--	--	--	0800 0.07	--	--	--	--	--	--	--		
--	--	Aug.	--	--	--	--	--	--	--	--	--	--	--	--		
--	--	Sept.	--	--	--	--	--	--	--	--	--	--	--	--		
STATION C FRESHWATER LAGOON--Continued																
--	--	Oct., 1974	--	--	--	--	--	--	--	--	1530 2.23	--	2.3	3		
--	--	Nov.	--	--	1700 .35	--	1315 .62	--	--	--	--	--	--	3.0	0	
--	--	Dec.	--	--	--	--	--	--	--	--	--	--	--	9.8	0	
--	--	Jan., 1975	--	--	--	--	--	--	--	--	--	--	1145 1.42	5.4	5	
--	--	Feb.	--	--	--	--	--	--	--	1220 2.82	--	--	--	8.1	3	
--	--	Mar.	--	--	--	--	--	0900 >10.08	--	--	--	--	1010 .02	20.1		
--	--	Apr.	--	--	--	--	--	--	--	--	1300 3.95	--	4.0	0		
--	--	May	--	--	--	--	--	--	--	--	1850 .68	--	.7	0		
--	--	June	--	--	--	--	--	--	--	--	--	--	--			
--	--	July	--	--	--	--	--	--	--	--	--	--	--			
--	--	Aug.	--	--	--	--	--	--	--	--	--	--	--			
--	--	Sept.	--	--	--	--	--	--	--	--	--	--	--			

TABLE 5.

Month	Accumulated rainfall, in inches (upper number, if entered, is time of measurement)															
	Day															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
11482330 HAYES CREEK NEAR ORICK																
Oct., 1974	S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nov.	--	--	--	--	--	1000	2400	0730	--	--	--	--	--	--	--	--
						0.22	0.99	0.00								
Dec.	1650 0.47	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Jan., 1975	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1700 7.23	--
Feb.						0700	2400	2400	0630		1600	2400	2400	0200		
						.00	.12	1.53	0.13		0.07	0.89	0.56	0.09		
Mar.																
Apr.																
May																
June																
July	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sept.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
STATION D UPPER LITTLE LOST MAN CREEK																
Oct., 1974	S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nov.	--	--	--	--	--	--	--	1210 1.30								
Dec.	1715 1.42	1350 0.87	--	--	--	--	--	--	--	--	--	1650 5.48	--	--	--	--
Jan., 1975	--	--	--	--	--	--	--	--	--	--	--	--	1500 7.71	--	--	--
Feb.	--	--	1000 2.28	--	1545 1.64	--	--	1155 1.13	--	--	1125 2.43	--	1015 1.51	--	--	--
Mar.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Apr.	--	--	--	--	--	--	--	--	1005 2.53	--	--	--	--	--	--	--
May	--	--	--	--	--	--	--	1630 1.70	--	--	--	--	--	--	--	--
June	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
July	--	--	--	--	--	--	--	--	--	1445 .54	--	--	--	--	--	--
Aug.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sept.	--	1450 .02	--	--	--	--	--	--	--	--	--	--	--	--	--	--

E 5.-- Rainfall--Continued

Month	Accumulated rainfall, in inches (upper number, if entered, is time of measurement)													Monthly total based on correlation	Percentage of monthly total based on correlation
	18	19	20	21	22	23	24	Day	25	26	27	28	29	30	31
11482330 HAYES CREEK NEAR ORICK--Continued															
Oct., 1974	--	--	--	1200 0.03	--	--	--	--	--	1230 2.20	--	--	--	2.4	8
Nov.	1100 0.67	--	1835 0.09	2400 1.64	0700 0.00	--	--	--	1600 0.88	--	--	--	--	4.9	0
Dec.	--	--	--	--	--	--	--	--	--	--	--	--	--	12.93	0
Jan., 1975	--	--	--	--	--	--	--	--	--	--	--	--	--	9	22
Feb.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mar.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Apr.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
June	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
July	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sept.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
STATION D UPPER LITTLE LOST MAN CREEK--Continued															
Oct., 1974	--	--	--	1200 .01	--	--	--	--	--	--	1845 2.34	--	2.4	3	
Nov.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dec.	--	--	--	--	--	--	--	--	--	--	4.76	11.1	0		
Jan., 1975	--	--	--	--	--	--	--	--	--	--	1200 1.21	9.4	5		
Feb.	--	--	--	--	--	--	--	--	--	1445 5.81	--	--	14.3	3	
Mar.	--	2030 14.49	--	--	--	1415 4.32	--	--	--	--	1235 2.57	21.4	0		
Apr.	--	--	--	--	--	--	--	--	--	1500 2.90	--	5.4	9		
May	--	--	--	--	--	--	--	--	--	--	1830 .83	2.5	0		
June	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
July	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Aug.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Sept.	0930 .02	--	--	--	--	--	--	--	--	--	0910 .00	--	T	0	

TABLE 5.--

Month	Accumulated rainfall, in inches (upper number, if entered, is time of measurement)																
	Day																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
STATION E HOLTER RIDGE																	
Oct., 1974	S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nov.	--	--	--	--	--	--	--	--	1150	--	--	--	--	--	--	--	--
Dec.	1725	1405	--	--	--	--	--	--	1.28	--	--	--	--	--	--	--	--
	1.57	0.78															
Jan., 1975	--	--	--	--	--	--	--	--	--	--	--	--	--	1515	--	1130	
														9.61	--	0.00	
Feb.	--	--	1215	--	1530	--	--	--	1145	--	--	1135	--	1005	--	--	--
			1.75		1.51				1.26			3.19		1.90			
Mar.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Apr.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
May	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
June	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
July	--	--	--	--	--	--	--	--	--	--	1455	--	--	--	--	--	--
											0.51						
Aug.																	
Sept.	--	1500															
		.00															
STATION F BALD HILL ROAD AND C-LINE																	
Oct., 1974	S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nov.	--	--	--	--	--	--	--	--	1750	--	--	--	--	--	--	--	--
									1.25								
Dec.	1735	1400	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1.57	.70															
Jan., 1975	--	1200	--	--	--	--	--	--	--	--	--	1545	--	--	1200	--	
		11.00										8.82			.00		
Feb.	--	--	1010	--	1200	--	--	--	1135	--	--	1145	--	0850	--	--	--
			1.81		1.68				1.35			3.48		1.87			
Mar.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Apr.	--	--	--	--	--	--	--	--	--	1015	--	--	--	--	--	--	--
										2.48							
May	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
June	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
July	--	--	--	--	--	--	--	--	--	--	1535	--	--	--	--	--	--
											.56						
Aug.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sept.	--	1630	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0945
		.99															0.02

5.--
17
Rainfall--Continued

Month	Accumulated rainfall, in inches (upper number, if entered, is time of measurement)													Percentage of monthly total based on correlation	
	18	19	20	21	22	23	24	Day	25	26	27	28	29	30	
STATION E HOLTER RIDGE--Continued															
Oct., 1974	--	--	--	--	--	--	--	--	--	--	--	--	1700 2.52	--	2.6
Nov.	--	--	1920 1.39	--	0805 1.46	--	--	--	--	--	--	--	--	--	5.7
Dec.	--	--	--	--	--	--	--	--	--	--	--	--	10.66	11.4	0
Jan., 1975	--	--	--	--	--	--	--	--	--	--	--	--	--	10.6	9
Feb.	--	--	--	--	--	--	--	--	--	--	1500 6.02	--	--	15.6	0
Mar.	--	--	--	--	--	--	1350 21.79	--	--	--	--	--	1255 2.71	24.5	0
Apr.	--	--	--	--	--	--	--	--	--	--	1515 6.21	--	--	6.2	0
May	--	--	--	--	--	--	--	--	--	--	--	1820 2.28	--	2.3	0
June	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
July	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sept.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
STATION F BALD HILL ROAD AND C-LINE--Continued															
Oct., 1974	--	--	--	--	--	--	--	--	--	--	--	1640 2.26	--	2.4	4
Nov.	--	--	1900 1.22	--	1230 1.38	--	--	--	--	--	--	--	--	5.4	2
Dec.	--	--	--	--	--	--	--	--	--	--	--	--	--	13.3	0
Jan., 1975	--	--	--	--	--	--	--	--	--	--	--	1015 1.03	--	9.9	0
Feb.	--	--	--	--	--	--	--	--	--	--	1555 5.54	--	--	15.2	3
Mar.	--	--	--	--	--	1330 20.86	--	--	--	--	--	1305 2.79	--	23.7	0
Apr.	--	--	--	--	--	--	--	--	--	--	1525 4.01	--	--	6.5	0
May	--	--	--	--	--	--	--	--	--	--	1800 2.24	--	--	2.2	0
June	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
July	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sept.	--	--	--	--	--	--	--	--	--	--	--	0925 .00	T	0	--

TABLE 5.--

Month	Accumulated rainfall, in inches (upper number, if entered, is time of measurement)																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
STATION C BOND CREEK AND FORTY FOUR CREEK DIVIDE (A-1.IHE)																	
Oct., 1974	S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nov.	--	--	--	--	--	1900	--	1315	--	--	--	--	--	--	--	--	--
Dec.	--	1300	--	--	--	0.18	--	1.15	--	--	--	--	--	--	--	--	--
Jan., 1975	--	2.48	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Feb.	--	--	1530	--	--	--	1830	--	1510	--	--	1650	--	1345	--	--	--
Mar.	--	--	3.20	--	--	--	1.55	--	1.63	--	--	2.50	--	1.25	--	--	--
Apr.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
May	--	--	--	--	1525	--	--	--	--	--	--	--	--	--	--	--	--
June	--	--	--	--	1.50	--	--	--	--	--	--	--	--	--	--	--	--
July	--	--	--	--	--	--	--	--	--	1200	--	--	--	--	--	--	--
Aug.	--	--	--	--	--	--	--	--	--	0.53	--	--	--	--	--	--	--
Sept.	--	1200	--	--	.66	--	--	--	--	--	--	--	--	--	--	--	--
11482260 MILLER CREEK AT MOUTH NEAR ORICK																	
Oct., 1974	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nov.	S	--	--	--	--	--	--	--	--	--	--	1050	--	--	--	--	--
Dec.	--	--	--	--	--	--	--	--	--	--	--	1.27	--	--	--	--	--
Jan., 1975	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Feb.	--	--	--	2340	1030	2400	0815	--	--	2400	2400	0300	--	--	--	--	--
Mar.	--	--	--	.09	.06	1.01	.16	--	--	4.03	0.70	.08	--	--	--	--	--
Apr.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
May	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
June	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
July	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sept.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

5.--

-- Rainfall--Continued

Month	Accumulated rainfall, in inches (upper number, if entered, is time of measurement)													Percentage of monthly total based on correlation		
	Day															
	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
STATION G BOND CREEK AND FORTY FOUR CREEK DIVIDE (A-LINE)--Continued																
Oct., 1974	--	--	--	--	--	--	--	--	--	--	--	1500	2.31	--	2.5	6
Nov.	--	--	1700	--	1400	--	--	--	--	--	--	--	--	--	6	31
Dec.	--	--	1.10	--	1.89	--	--	--	--	--	--	--	--	--		
Jan., 1975	--	--	--	--	--	--	--	--	--	--	--	--	>11.45	>12.0		5
Feb.	--	--	1330	--	--	--	--	--	--	--	--	1150	0.71	--	14	13
Mar.	--	--	2.93	--	--	--	--	--	--	--	--	1200	--	1200	27.9	0
Apr.	--	--	--	--	--	--	--	--	--	--	--	27.86	--	.00		
May	--	--	--	--	--	--	--	--	--	--	--	1445	--	--	--	--
June	--	--	--	--	--	--	--	--	--	--	--	1.19	--			
July	--	--	--	--	--	--	--	--	--	--	--	1715	--	2.3	--	--
Aug.	--	--	--	1015	--	--	--	--	--	--	--	0.26	--	--	--	--
Sept.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
11482260 MILLER CREEK AT MOUTH NEAR ORICK--Continued															--	--
Oct., 1974	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nov.	--	--	2200	2400	0800	--	--	--	--	--	--	--	--	--	--	--
Dec.	--	--	.84	1.16	.00	--	--	--	--	--	--	--	--	--	--	--
Jan., 1975	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Feb.	--	1100	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mar.	--	4.19	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Apr.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
May	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
June	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
July	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sept.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

TABLE 5.--

Month	Accumulated rainfall, in inches (upper number, if entered, is time of measurement)																
	Day																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
11482250 MILLER CREEK NEAR ORICK																	
Oct., 1974	S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nov.	--	--	--	--	--	--	1645	0830									
							3.31	0.01									
Dec.																	
Jan., 1975																	
Feb.					1630	1300	--	2320	1100	--	--	2050	2100	0730	--	--	--
					5.82	0.02		.92	0.31			3.42	0.75	0.09			
Mar.	--	--	--	--	--	--	--	--	--	--	--	1330					
												3.85					
Apr.																	
May																	
June																	
July																	
Aug.																	
Sept.																	
STATION H MILLER CREEK AT C-LINE																	
Oct., 1974	S																1010
Nov.	--	--	--	--	--	--	2200	1055	0815	--	--	--	--	--	--	--	0.92
Dec.	1810	--	1435				.05	1.16	.04								
	1.39	--	2.15														
Jan., 1975	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1220	--
																8.71	
Feb.	--	--	1030	--	1630	2300	1000	2320	0800	--	--	2355	2100	0730	--	--	--
			4.41	--	1.68	.09	.04	.85	.24			3.99	.77	.09			
Mar.	--	--	0945	--	--	--	--	--	--	--	--	--	--	0930			
			1.02	0.65	.03									.54			
Apr.	--	--	1450	--	--	--	--	--	--	--	1425	--	--	--	--	--	--
			.15	--							2.11	--	--				
May	--	--	--	--	--	--	--	1200		--	--	--	--	--	--	--	--
								1.46									
June	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
July	--	--	--	--	--	--	--	--	--	--	1515	--	--	--	--	--	--
											.39						
Aug.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sept.	--	1700															
		.89															

BLE 5.--

Rainfall--Continued

Month	Accumulated rainfall, in inches (upper number, if entered, is time of measurement)													Percentage of monthly total based on correlation	
	18	19	20	21	22	23	24	Day	25	26	27	28	29	30	
16 17															
11482250 MILLER CREEK NEAR ORICK--Continued															
Oct., 1974	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nov.															--
Dec.															--
Jan., 1975															--
Feb.	--	--	--	--	--	--	--	1400	--	1230	--	--	--	--	--
								4.81		0.42					
Mar.															--
Apr.															--
May															--
June															--
July															--
Aug.															--
Sept.															--
STATION H MILLER CREEK AT C-LINE--Continued															--
Oct., 1974															--
1010 0.92															
Nov.		2200	2400	0930	--	--	--	--	--	--	--	--	5	29	
		0.00	1.43	0.00											
Dec.													5.05	--	--
1220 0.71															
Jan., 1975	--	--	--	--	--	--	--	--	1500	--	1200	1515	--	11	18
									4.70	--	.39	.42	--	16	12
Feb.	--	--	--	--	--	--	--								
Mar.								1315	1345	--	--	--	1330	--	--
								3.75	2.82				.00		
Apr.	--	--	--	--	--	--	--	--	--	--	--		1545	--	5.3
													3.23	--	0
May	--	--	--	--	--	--	--	--	--	--	--	--	1430	1.9	0
													.48		
June	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
July	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sept.															--

TABLE 5.--

Month	Accumulated rainfall, in inches (upper number, if entered, is time of measurement)																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
STATION I C-50 ROAD																	
Oct., 1974	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nov.	--	--	--	--	--	--	--	--	1010								
									1.25								
Dec.	1800	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Jan., 1975	11.45	--	--	--	--	--	--	--	--	--	--	--	--	--	1315		
															8.28		
Feb.	--	--	1045	--	--	1330	--	--	1130	--	--	1255	--	1400	--	--	--
															1.59		
Mar.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Apr.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
May	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
June	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
July	--	--	--	--	--	--	--	--	--	--	1520	--	--	--	--	--	--
											0.37						
Aug.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sept.	--	1715	0.44	--	--	--	--	--	--	--	--	--	--	--	--	--	--
STATION J ELK CAMP																	
Oct., 1974	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nov.	0	0	0	0	0.03	0	1.30	0.01	.49	0.01	0	0	0	0	0	0	1.02
Dec.	.53	1.28	1.92	0.62	.01	.35	.01	0	0	.57	1.73	.72	0.50	3.49	0.20	.50	.04
Jan., 1975	.01	0	1.35	.39	3.38	.88	2.93								0	0	0
Feb.				1.58	1.56	.16	.11	1.04	1.21	.71	.40	2.70	.79	.11	.08	.18	0
Mar.	.71	.67	0	0	0	.34	.50	1.45	.30	.04	0	0	.25				
Apr.					.10	0	.47	.07	0	0	0	0	.09	.56	.01	.01	0
May	0	.27	1.30	.17	.01	0	0	0	0	.47	.30	0	0	0	0	0	0
June	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
July	.02	0	0	0	0	0	0	0	0	0	0	0	0	0	.03	0	0
Aug.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.32
Sept.	0	0	0	0	0	0	0	0	.15	0	0	0	0	0	0	0	.04

5.--

Rainfall--Continued

Month	Accumulated rainfall, in inches (upper number, if entered, is time of measurement)													Monthly total based on correlation	Percentage of monthly total
	18	19	20	21	22	23	24	25	26	27	28	29	30		
STATION I C-50 ROAD--Continued															
Oct., 1974	--	--	--	--	--	--	--	--	--	--	S	--	1720	--	>1.8
													1.83		--
Nov.	--	--	2000		1210	--	--	--	--	--	--	--	--	--	4.7
			1.19		1.07										0
Dec.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	>11.5
Jan., 1975	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10
Feb.	--	--	--	--	--	--	--	--	--		1530	--	--	--	14.7
											5.20				10
Mar.	--	--	--	--	--	--	--	--	--	--	--	--	1350	--	18.9
Apr.	--	--	--	--	--	--	--	--	--	--	--	--	1555	--	5.2
											5.19				0
May	--	--	--	--	--	--	--	--	--	--	--	--	1420	--	2.0
											2.03				0
June	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
July	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug.	--	--	--	--	--	1230	--	--	--	--	--	--	--	--	--
						.25									
Sept.	--	--	--	--	--	--	--	--	--	--	--	--	1000	--	.0
											.00				0
STATION J ELK CAMP--Continued															
Oct., 1974	0	0	0	0	0	0	0	0	0	1.03	1.73	0	.08	.05	2.89
Nov.	0.22	0.01	0	1.21	.03	0	0.77	0.27	0.02	.43	0	0	0	--	5.82
Dec.	0	.09	.09	1.31									0	0	17
Jan., 1975															--
Feb.	1.13	3.21	.70	0	0	0	0	0	.08	.74	0	--	--	--	19
Mar.															--
Apr.	.27	.25	0	0	.18	.48	1.61	.49	.01	.01	0	0	0	--	7
															32
May	0	0	0	0	0	0	0	0	0	0	0	0	0	--	2.52
June	0	0	0	0	0	.39	.08	0	0	0	0	0	0	--	.47
July	.06	0	.01	0	0	0	0	0	0	0	.02	.02	0	0	.16
Aug.	0	0	0	0	0	0	0	0	0	0	.59	.02	0	0	.93
Sept.	0	0	0	0	0	0	0	0	0	0	0	0	0	--	.19

TABLE 5.--

Month	Accumulated rainfall, in inches (upper number, if entered, is time of measurement)																
	Day																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
STATION K HEAD OF TOM MCDONALD CREEK																	
Oct., 1974	S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nov.	--	--	--	--	--	1930	--	1300	--	--	--	--	--	--	--	--	--
Dec.	--	--	1240	2.31	--	--	--	--	--	--	--	--	--	--	--	--	--
Jan., 1975	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1430		
Feb.		1515	0	--	1430	--	1900	--	1450	--	--	1710	1335	1330			9.13
													3.45	1.71	0.08		
Mar.																	
Apr.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
May	--	--	--	--	1500	--	--	--	--	--	--	1700	--	--	--	--	--
June	--	--	--	--	1.91	--	--	--	--	--	--	.69	--	--	--	--	--
July	--	1800	0.71	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sept.	--	1130	.89														
11482225 HARRY WIER CREEK NEAR ORICK																	
Oct., 1974						2200	2400	1000	--	--	--	--	--	--	--	--	--
Nov.	--	--	--	--	--	.00	1.46	.00	--	--	--	--	--	--	--	--	--
Dec.																	
Jan., 1975	--	--	--	--	--	--	--	--	--	--	1230	--	--	--	--	--	--
Feb.	--	--	--	--	1800	2400	--	0900	--	--	1.36	--	--	--	--	--	--
					5.64	.13		.29				4.31	.47	.12			
Mar.																	
Apr.																	
May																	
June																	
July																	
Aug.																	
Sept.																	

Rainfall--Continued

Month	Accumulated rainfall, in inches (upper number, if entered, is time of measurement)													Percentage of monthly total based on correlation	
	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
STATION K HEAD OF TOM McDONALD CREEK--Continued															
Oct., 1974	--	--	--	--	--	--	--	--	--	--	--	1440	1615	2.6	0
												2.47	0.17		
Nov.	--	--	1715	--	1335	--	--	--	--	--	--	--	--	6	21
			1.66		1.91										
Dec.	--	--	--	--	--	--	--	--	--	--	--	--	>11.45	>12.5	8
Jan., 1975	--													--	--
Feb.	--	--	1315	--	5.25	--	--	--	--	--	--	1130	--	17	12
												0.96			
Mar.	--											--	1200	--	--
												.00			
Apr.	--	--	--	--	--	--	--	--	--	--	--	1400	--	6.2	0
												6.24			
May	--	--	--	--	--	--	--	--	--	--	--	1655	--	2.8	0
												.20			
June	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
July	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sept.	--											--	--	--	--
11482225 HARRY WIER CREEK NEAR ORICK--Continued															
Oct., 1974	--											S	--	1400	--
												.07			
Nov.	--	--	1900	2400	0800	--						--	--	--	--
			1.17	1.14	.00										
Dec.	--													--	--
Jan., 1975	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Feb.	--	--	--	--	--	--	--	1515	--	--	--	--	--	--	--
								4.42							
Mar.	--													--	--
Apr.	--												--	--	--
May	--													--	--
June	--											--	--	--	--
July	--											--	--	--	--
Aug.	--											--	--	--	--
Sept.	--											--	--	--	--

TABLE 5.--

Month	Accumulated rainfall, in inches (upper number, if entered, is time of measurement)																
	Day																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
STATION L M-LINE AND G-LINE																	
Oct., 1974	8	--	--	--	--	--	--	--	--	1200	--	--	--	--	--	--	--
	1000	--	--	--	--	1905	1945	1245	--	0.01	--	--	--	--	--	--	--
Nov.	0.01	--	--	--	--	0.04	1.25	0.01	--	--	--	--	--	--	--	--	--
Dec.	--	1135	--	--	--	--	--	1300	--	--	--	--	--	--	--	--	--
	2.65	--	--	--	--	--	--	2.83	--	--	--	--	--	--	--	--	--
Jan., 1975	--	--	--	--	--	--	--	--	1710	--	--	--	--	--	1415	--	--
									7.71	--	--	--	--	--	1.13	--	--
Feb.	--	--	1450	--	1305	--	1820	--	1435	--	--	1810	1630	1300	--	--	--
			5.09		1.60		.20		1.51			3.78	1.46	0.16	--	--	--
Mar.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Apr.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1030	--	--
															2.74	--	--
May	--	--	--	--	0955	--	--	--	--	--	1055	--	--	--	--	--	--
					1.73						.66	--	--	--	--	--	--
June	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
July	--	1110	--	--	--	--	--	--	--	1120	--	--	--	--	--	--	--
	.66	--	--	--	--	--	--	--	--	0.00	--	--	--	--	--	--	--
Aug.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sept.	--	1115	--	--	--	--	--	--	--	--	--	--	--	--	0945	--	--
	.69	--	--	--	--	--	--	--	--						0.03	--	--
11482200 REDWOOD CREEK AT SOUTH PARK BOUNDARY NEAR ORICK																	
Oct., 1974	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nov.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dec.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Jan., 1975	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Feb.	--	--	--	--	--	0900	1220	--	0900	--	--	1530	1400	0800	--	--	--
						5.25	.19		.87			2.95	1.57	.09	--	--	--
Mar.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Apr.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
May	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
June	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
July	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sept.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Rainfall--Continued

Month	Accumulated rainfall, in inches (upper number, if entered, is time of measurement)													Monthly total	Percentage of monthly total based on correlation		
	18	19	20	21	22	23	24	Day	25	26	27	28	29	30	31		
STATION L M-LINE AND G-LINE--Continued																	
Oct., 1974	--	--	--	--	--	--	--	--	--	--	1700	--	--	1430	2.4	0	
Nov.	--	--	1830	--	1330	--	--	--	--	--	2.20	0.16	--	--	5	22	
Dec.	--	--	1.41	--	1.36	--	--	--	--	--	--	--	--	--	10.20	14.2	
Jan., 1975	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	11	18
Feb.	--	1145	1300	--	--	--	--	--	--	--	1045	--	--	--	18	11	
Mar.	--	4.48	.88	--	--	--	--	--	--	--	.93	--	--	--	T	22.7	
Apr.	--	--	--	1415	--	--	--	--	1100	--	--	--	--	1200	.00	0	
May	--	--	--	16.93	--	--	--	--	5.79	--	--	--	--	1830	1115	5.8	
June	--	--	--	--	--	--	--	--	--	--	3.01	0.00	--	--	T	0	
July	--	--	--	--	--	--	--	--	--	--	--	--	--	1630	--	2.4	
Aug.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Sept.	1030	T	--	--	--	--	--	--	--	--	--	--	--	2400	--	T	
11482200 REDWOOD CREEK AT SOUTH PARK BOUNDARY NEAR ORICK--Continued																	
Oct., 1974	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Nov.	--	--	--	1500	1100	--	--	--	--	--	2.22	.15	--	--	--	--	
Dec.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Jan., 1975	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Feb.	--	--	--	2100	--	--	--	--	--	1200	--	--	--	--	--	--	
Mar.	--	--	--	4.39	--	--	--	--	--	0.30	--	--	--	--	--	--	
Apr.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
May	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
June	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
July	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Aug.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Sept.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	

TABLE 5.--

Month	Accumulated rainfall, in inches (upper number, if entered, is time of measurement)																
	Day																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
STATION M M-7-5 ROAD																	
Oct., 1974	S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nov.	--	--	1300	0.15	--	--	2030	2005	0.03	1.15	--	--	--	--	--	--	--
Dec.	--	1200	2.65	--	1040	--	--	1240	--	--	--	--	--	--	--	--	--
Jan., 1975	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1345	10.21	--
Feb.	--	--	1430	4.68	--	2400	2400	2400	2400	1325	--	--	1400	1400	--	--	--
Mar.	--	--	--	--	--	--	--	--	--	--	--	--	3.54	1.60	--	--	--
Apr.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
May	--	--	--	--	--	1030	1.69	--	--	--	--	--	--	1500	.60	--	--
June	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
July	--	--	--	--	--	--	--	--	--	--	--	--	1100	0.33	--	--	--
Aug.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sept.	--	1030	.82	--	--	--	--	--	--	--	--	--	--	--	--	--	--
STATION N SHOTGUN PASS																	
Oct., 1974	S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nov.	--	--	--	--	--	--	1850	--	1200	--	--	--	--	--	--	--	--
Dec.	--	1115	2.43	--	--	--	.23	--	1.38	--	--	--	--	--	--	--	--
Jan., 1975	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1245	10.17	--
Feb.	--	--	1400	2.28	--	1245	1.80	--	1340	.34	1450	--	--	1300	1210	1545	--
Mar.	--	--	--	--	--	--	--	--	--	--	--	--	3.40	1.62	0.12	--	--
Apr.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
May	--	--	--	--	0940	1.67	--	--	--	--	--	--	1030	.85	--	--	--
June	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
July	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sept.	--	1000	1.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--

35.--

Rainfall--Continued

6 17	Month	Accumulated rainfall, in inches (upper number, if entered, is time of measurement)													Percentage of monthly total based on correlation	
		Day														
		18	19	20	21	22	23	24	25	26	27	28	29	30	Monthly total	
STATION M M-7-5 ROAD--Continued																
--	Oct., 1974	--	--	--	--	--	--	--	--	--	--	1520	1.96	--	2.1	0
--	Nov.	--	--	1815	2400	0930	--	--	--	--	--	--	--	--	6	33
--	Dec.	--	--	--	--	--	--	--	--	--	--	--	--	10.11	15	13
--	Jan., 1975	--	--	--	--	--	--	--	--	--	--	--	--	--	12	17
--	Feb.	--	--	--	--	--	--	--	--	--	--	1100	6.39	--	18	15
--	Mar.	--	--	--	--	--	--	--	--	--	--	1215	--	--	20.2	0
--	Apr.	--	--	--	--	--	--	--	--	--	--	20.17	1200	--	5.8	0
--	May	--	--	--	--	--	--	--	--	--	--	5.84	--	--	2.3	0
--	June	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
--	July	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
--	Aug.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
--	Sept.	--	--	--	--	--	--	--	--	--	--	0830	.00	--	.0	0
STATION N SHOTGUN PASS--Continued																
--	Oct., 1974	--	--	--	--	--	--	--	--	--	--	1730	2.23	--	2.4	2
--	Nov.	--	--	1710	--	1400	--	--	--	--	--	--	--	--	6	23
--	Dec.	--	--	2.18	--	1.07	--	--	--	--	--	--	--	11.95	13	11
--	Jan., 1975	--	--	--	--	--	--	--	--	--	--	--	--	1700	11.5	2
--	Feb.	1100	--	0.87	--	--	--	--	--	--	--	1030	5.92	--	17.3	1
--	Mar.	--	--	--	--	--	--	--	--	--	--	1140	27.75	--	27.8	0
--	Apr.	--	--	--	--	--	--	--	--	--	--	1230	6.18	--	6.2	0
--	May	--	--	0930	.17	--	--	--	--	--	--	1250	.01	--	2.7	0
--	June	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
--	July	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
--	Aug.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
--	Sept.	0815	--	.02	--	--	--	--	--	--	--	--	--	--	T	0

TABLE 5.--

Month	Accumulated rainfall, in inches (upper number, if entered, is time of measurement)																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
STATION O COPPER CREEK																	
Oct., 1974	S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nov.	--	--	--	--	--	--	--	1815	1.41	--	--	--	--	--	--	--	--
Dec.	1845 1.49	--	--	--	--	--	--	--	--	1445 4.09	--	1350 2.15	--	--	--	--	--
Jan., 1975	--	--	--	--	--	--	--	--	--	--	--	1510 9.75	--	--	--	--	--
Feb.	--	--	--	--	--	--	--	1230 8.85	--	--	--	--	--	--	--	--	--
Mar.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Apr.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
May	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
June	--	--	1100 2.28	--	--	--	--	--	--	--	--	--	--	--	--	--	--
July	--	--	--	--	--	--	--	--	--	--	1700 0.39	--	--	--	--	--	--
Aug.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sept.	--	1830 0.66	--	--	--	--	--	--	--	--	--	--	--	--	--	1200 0.05	--
STATION P KLAMATH-KORREL ROAD																	
Oct., 1974																	
Nov.	0	0	0	0	0.02	0	1.20	0	.37	.01	0	0	0	0	0	0	1.27
Dec.	.14	.89	1.35	.52													
Jan., 1975	0	0	1.33	.17	2.84	.50	2.14	1.16	1.40	.05	.02	0	0	0	0	0	0
Feb.	1.56	.97	.95	.23	1.03	.11	.10	.71	1.64	.57	.23	2.66	.60	.10	.11	.18	0
Mar.	.81	.95	0	0	.01	.21	.53	.94	.16	.18	.02	0	.21	0	1.17	.42	4.73
Apr.	0	.47	.94	.29	.30	0	.33	.06	0	0	0	0	.04	.44	.05	.01	0
May	0	0	.14	1.39	.02	0	0	0	0	.51	.14	0	0	0	0	0	0
June	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
July																	
Aug.																	
Sept.																	

5.--

Rainfall--Continued

Month	Accumulated rainfall, in inches (upper number, if entered, is time of measurement)													Percentage of monthly total based on correlation			
	18	19	20	21	22	23	24	Day	26	27	28	29	30	31			
STATION O COPPER CREEK--Continued																	
Oct., 1974	--	--	--	--	--	--	--	--	--	--	--	1810	2.01	--	2	11	
Nov.	--	1200	--	1650	--	--	--	--	--	--	--	--	--	--	4.9	5	
Dec.	--	--	--	--	--	--	--	--	--	--	--	--	7.28	15.0	0		
Jan., 1975	--	--	--	--	--	--	--	--	--	--	--	--	--	12	19		
Feb.	--	--	--	--	--	--	--	--	--	1430	10.54	--	--	--	17	14	
Mar.	--	--	--	--	--	--	--	--	1645	19.30	--	--	1200	.00	19.3	0	
Apr.	--	--	--	--	--	--	--	--	--	--	--	1640	5.74	--	5.7	0	
May	--	--	--	--	--	--	--	--	--	--	--	--	--	2.3	0		
June	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
July	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Aug.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Sept.	--	--	--	--	--	--	--	--	--	--	--	.00	--	.1	0		
STATION P KLAMATH-KORBEL ROAD--Continued																	
Oct., 1974	0	0	0	0	0	0	0	0	0	.45	1.22	0	.07	0	1.71	0	
Nov.	.52	0	0	.91	.01	0	.73	—	—	.01	0	0	--	6	12		
Dec.	—	—	1.51	.06	.01	0	0	.27	2.14	0	.01	.32	0	--	—	—	
Jan., 1975	0	0	0	0	0	0	0	.64	.01	0	.09	0	0	1.44	11.76	0	
Feb.	.98	3.95	.63	.01	0	.01	0	0	.02	.85	.01	--	--	18.21	0		
Mar.	8.10	—	—	—	—	—	—	—	0	0	0	0	0	28	34		
Apr.	.12	.12	0	0	.13	.46	1.84	.36	0	0	0	0	0	--	5.96	0	
May	0	0	0	0	0	0	0	0	0	0	0	0	0	1.55	0		
June	0	0	0	0	0	.24	.07	0	0	0	0	0	0	--	.31	0	
July	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Aug.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Sept.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		

TABLE 5.--

Month	Accumulated rainfall, in inches (upper number, if entered, is time of measurement)															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
STATION Q LITTLE RIVER-REDWOOD CREEK DIVIDE																
Oct., 1974																
Nov.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Dec.	1920 1.59	--	--	--	--	--	--	--	--	1400 4.52	--	--	--	--	--	--
Jan., 1975	--	--	--	--	--	--	--	--	--	--	--	--	10.52	--	--	--
Feb.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mar.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Apr.	--	--	--	--	--	--	--	--	--	1335 2.73	--	--	--	--	--	--
May	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
June	--	--	1025 2.40	--	--	--	--	--	--	--	--	--	--	--	--	--
July	--	--	--	--	--	--	--	--	--	1700 0.22	--	--	--	--	--	--
Aug.	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Sept.	--	--	1900 .44	--	--	--	--	--	--	--	--	--	--	0900 T	--	--
STATION R MINOR CREEK																
Oct., 1974																
Nov.	0	0	0	0	0	0	1.19	0	0.39	0	.01	0	0	0	0	1.35
Dec.	.17	1.12	2.50	.09	0.06	.36	.28	--	--	--	1.35	0.40	2.10	.11	.45	.01
Jan., 1975	0	0	1.44	.19	4.05	.68	4.01	1.70	1.73	.07	.01	.01	0	0	0	.01
Feb.	1.58	1.07	.53	.60	.84	.07	.11	.71	1.75	.67	.21	2.02	.39	.06	.13	.09
Mar.	.60	.38	.01	0	.01	.19	.72	.84	.26	.29	.01	0	.14	.01	.55	.51
Apr.	0	.38	.57	.17	.19	0	.28	.09	.01	0	0	0	.01	.52	.41	.01
May	.07	1.16	.06	.01	0	0	0	0	.46	.08	.01	0	0	0	0	0
June	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
July	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aug.	0	0	0	0	.05	.01	0	0	0	0	0	0	0	0	0	0
Sept.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

E 5.--

Rainfall--Continued

Month	Accumulated rainfall, in inches (upper number, if entered, is time of measurement)													Monthly total based on correlation	Percentage of monthly total based on correlation			
	18	19	20	21	22	23	24	Day	25	26	27	28	29	30	31			
16 17	STATION Q LITTLE RIVER-REWOOD CREEK DIVIDE--Continued																	
Oct., 1974	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Nov.	—	S	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Dec.	—	—	—	—	—	—	—	—	—	—	—	—	—	10.45	15.0	0		
Jan., 1975	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12	15		
Feb.	—	—	—	—	—	—	1205	—	—	—	—	1720	—	—	—	15	12	
Mar.	—	—	—	—	—	—	16.42	—	—	—	—	0.70	—	—	—	1545	28.2	0
Apr.	—	—	—	—	—	—	—	—	—	—	—	—	—	1715	3.88	6.6	0	
May	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.4	0	
June	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
July	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Aug.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Sept.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
STATION R MINOR CREEK--Continued																		
Oct., 1974	—	—	—	—	—	—	—	S	1.43	.66	0.01	.25	.02	2.37	0			
1.35	.44	0	0.01	0.73	0	0	1.34	0.07	0.25	.13	.01	0	0	—	5.92	0		
5 .01	.02	.05	.01	1.08	.07	.01	.01	0	.06	2.06	.02	.01	.33	.01	15	13		
.01	.01	0	0	.01	0	0	0	.73	.02	.01	.06	0	.01	1.16	15.91	0		
9 .01	1.23	4.32	.07	.01	.01	0	0	0	.08	.73	0	—	—	—	17.29	0		
1 7.34	4.58	.46	.14	2.34	1.87	1.04	2.86	.29	.01	0	0	0	0	0	25.45	0		
0	.15	.12	0	0	.39	.35	.39	.69	0	.01	0	0	0	—	4.74	0		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.85	0		
0	0	0	0	0	0	0	.22	.08	.01	0	0	0	0	—	.31	0		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.00	0		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.60	0		
0	0	0	0	0	0	0	0	0	0	0	0	0	0	—	.00	0		
Sept.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	—	0	0	

Water Temperature

Physical events, chemical reactions, and life processes are all influenced by the temperature of water. The viscosity of water is a physical phenomenon, inversely related to temperature, that influences the sediment-carrying capacity of water. A stream with higher water temperature will carry less suspended sediment than would a stream with lower water temperature (Guy, 1970, p. 19). Chemical reactions such as the solubility of elements and compounds in water are, in part, temperature dependent. A well-known example is the inverse relation between the solubility of oxygen and water temperature. Life processes or biochemical reactions are highly temperature controlled. Increasing water temperature causes the metabolic rate of most aquatic organisms to increase; in contrast, the increased water temperature decreases the quantity of dissolved oxygen available to meet the oxygen need of the organisms. Temperature extremes may be lethal to aquatic organisms.

Water temperature (table 6) was measured in the field using a hand-held mercury-filled thermometer calibrated to $\pm 0.2^{\circ}\text{C}$. In recording the water temperature, each thermometer was submersed as near as possible to the estimated centroid of flow of each stream for a 60-second stabilization period and read to the nearest 0.5°C while still submersed. During August and September 1974, maximum-minimum thermometers were used to measure water-temperature fluctuations during low-flow periods at selected sampling stations in the Redwood Creek drainage basin (table 7).

Stage

Stage (gage height) is the water-surface elevation referred to an arbitrary gage datum. Gage-height records are used in developing stage-discharge relations of streams. The significance of the stage-discharge relation will be described in the discussion of stream discharge.

Stages listed in table 6 were obtained, for the most part, from continuous recording gages, staff gages, and surveyed reference marks.

Stream Discharge

Stream discharge is the volume of water (water plus suspended solids) that passes a given point in the channel within a given period of time. In this country, stream discharge is usually expressed in cubic feet per second. Sediment transport of a stream is influenced, in part, by discharge. As stream discharge increases, the ability of the stream to transport suspended sediment and bedload increases. Changes in discharge may also profoundly affect the distribution and abundance of aquatic organisms.

Instantaneous discharge is the stream discharge at a particular instant of time. Instantaneous discharges listed in this report (tables 6, 8, 9, 10, 13, 14) are of four types: (1) Actual discharge measurements (current-meter and Parshall flume methods); (2) estimated discharge measurements (float method); (3) stage-discharge relation; and (4) hydrographic synthesis. The current meter, Parshall flume, and float methods are onsite stream-discharge measurements made by the techniques outlined by Buchanan and Somers (1969). Stage-discharge relation and hydrographic synthesis techniques are office computations using discharge and gage-height data obtained from field measurements. The stage-discharge relation is expressed as a rating curve and is developed by plotting actual discharge measurements versus gage heights obtained during the measurements. Rating curves were developed for each station whenever sufficient data were collected. Techniques for developing a stage-discharge relation are outlined by Carter and Davidian (1965). After the stage-discharge relation was defined for a station, instantaneous discharges were obtained from the rating curve for times when gage heights were known. Hydrographic synthesis consists of estimating hydrographs, continuous curves of discharge versus time, for sampling stations by using current-meter measurements and well-defined hydrographs from similar, nearby sampling stations. Discharges from current-meter measurements and discharges related to observed gage heights are plotted on graph paper. A continuous curve (hydrograph) is drawn through these points, following the shape of known, concurrent, and complete hydrographs.

Turbidity

Turbidity of a solution is a light-scattering phenomenon. The turbidity of a sample is the reduction of transparency due to the presence of particulate matter. Suspended materials such as clay, silt, microscopic organisms, and other finely divided organic and inorganic matter all cause turbidity. Turbidity affects esthetic properties, light penetration through water, and the well-being of aquatic organisms.

Turbidity was measured in the laboratory from water samples collected for analysis of suspended sediment. A Hach¹ model 2100A turbidity meter was used to measure turbidity (table 6) following the procedures and calculations described by Brown and others (1970, p. 156). All turbidity samples were analyzed in the Eureka, Calif., field laboratory. Values are reported in Jackson Turbidity Units (JTU).

¹The use of named products in this report is for identification only and does not imply endorsement by the U.S. Geological Survey.

Sediment

Sediment is solid material that originates mostly from disintegrated rock, but also includes organic material and chemical and biochemical precipitates that are transported or deposited by a stream. Suspended sediment is the particulate matter that at any given time is maintained in suspension by upward components of stream turbulence, or suspended as colloids. Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the zone between the water surface and about 0.3 ft (0.09 m) above the streambed, expressed as milligrams of dry sediment per liter of water-sediment mixture. Bedload is sediment that is transported by rolling, sliding, or bouncing along the streambed. Bedload discharge is expressed as the rate, in tons, of dry sediment transported per day past a given point.

The quantity and particle-size distribution of sediment are a function of the nature of the eroding materials and the erosional processes operating in a drainage basin. Physical and biological processes in the aquatic environment also are influenced strongly by sediment. For example, if light penetration is obstructed by suspended sediment, photosynthesis may be inhibited. Sediment can also be deleterious to aquatic organisms because of direct burial, abrasive action on living tissue, and impeding percolation of oxygenated water into and through streambed gravel environments.

Suspended-sediment samples were collected manually using depth-integrating samplers or automatically by single-stage samplers according to the methods described by Guy and Norman (1970). Depth-integrated samples were collected using either a D-49 or DH-48 sampler and either the equal-transit-rate (ETR) or the centroids-of-equal-discharge increments (EDI) sampling method.

Single-stage suspended-sediment samples were collected at selected synoptic and nonsynoptic stations. The single-stage samplers collect samples of storm runoff that could not otherwise be sampled because of manpower limitations. Data collected by the single-stage samplers are useful in comparing suspended-sediment concentrations between different subbasins during storm events. The samplers are of the U-59B series as described by the Subcommittee on Sediment of the U.S. Inter-Agency Committee on Water Resources (1961). Determining the date and time that single-stage samples were collected poses a problem because determining when the stream rose past any given sampler nozzle is often difficult. The date and time of the sample collection must be estimated unless someone is present at the moment the sample was collected or a stage recorder is in operation at that station. Dates and times assigned to the single-stage samples in this report were based on the gage-height records from nearby recording stations and are approximate values only. Single-stage samplers, under certain conditions, are susceptible to recirculation, which usually increases total concentration of suspended sediment and the percentage of sand. Those samples that were believed to have been enriched by recirculation were not listed in this report. These unlisted data are in the files of the California District Chief, U.S. Geological Survey, Water Resources Division, Menlo Park, Calif., and are available upon request.

Bedload samples were collected using the Helleys-Smith pressure-difference bedload sampler. ETR and EDI methods used in taking suspended-sediment samples were modified for bedload measurements according to procedures outlined by Helleys and Smith (1971). All bedload rates listed in this report were computed from measurements made in the field and bedload weights obtained in the laboratory. Because the Helleys-Smith bedload sampler has not yet been calibrated, a trap-efficiency coefficient of 1.0 was used. Suspended sediment and bedload samples were shipped to the Geological Survey sediment laboratory in Sacramento and analyzed (table 6) using the procedures described by Guy (1969).

TABLE 6.--Water temperature, stage, instantaneous discharge, turbidity, suspended-sediment concentration and sieve diameter percentage finer than 0.062 mm, and bedload discharge

[See figures 2 and 4 for location of sampling stations. See the following section in the text "Particle Size" for an explanation of suspended sediment sieve diameter percentage of particles finer than 0.062 mm.
 A, instantaneous discharge measured with current meter or flume.
 C, preceding time of sample collection indicates that sample was collected automatically with a single-stage sediment sampler.
 D, datum for single-stage sediment sampler is different than datum for station. E, discharge estimated by float method, or estimated stage.
 F, stage based on temporary datum. G, preceding date of sample collection indicates auxiliary data collected prior to establishment of station for this study, and thus precedes April 11, 1974, the beginning date of data released in this report]

DATE	TIME	TEMPERATURE (DEG C)	STAGE ABOVE DATUM	INSTANTANEOUS DISCHARGE (FT ³ /S)	TURBIDITY (NTU)	SUSPENDED SEDIMENT CONCENTRATION (MG/L)	SUS. SED. SIEVE MENT		
							PENED SFT.	% FINER MFT.	THAN 0.062 MM
11481500 REDWOOD CREEK NEAR BLUE LAKE									
MAY, 1974									
13...	1200	9.5	4.67	83	10	29	76	.00	
JULY									
14...	0915	19.0	4.17	15	--	--	--	--	
14...	0940	19.0	4.17	15	1	4	--	--	
SEP.									
01...	1500	24.5	--	4.7	--	--	--	--	.00
NOV.									
21...	0845	--	4.1A	A16	--	--	--	--	
21...	0910	9.5	4.1A.	16	1	3	--	--	
JULY, 1975									
30...	1215	20.0	3.60	A16	--	--	--	--	
30...	1235	21.0	3.60	15	1	3	--	--	
30...	1615	24.5	3.60	A16	--	--	--	--	
30...	2015	20.0	3.60	A15	--	--	--	--	
31...	0015	18.0	3.60	A15	--	--	--	--	
31...	0030	18.0	3.60	15	1	3	--	--	
31...	0425	16.5	3.59	A14	--	--	--	--	
31...	0815	16.0	3.59	A15	--	--	--	--	
31...	1200	21.0	3.59	14	1	5	--	--	
31...	1215	21.0	3.59	A15	--	--	--	--	
11482020 REDWOOD CREEK AT REDWOOD VALLEY BRIDGE, NEAR BLUE LAKE									
JULY, 1974									
18...	1215	--	--	A21	--	--	--	--	
18...	1245	25.0	--	--	1	6	--	--	
NOV.									
21...	1025	--	5.31	A23	--	--	--	--	
21...	1045	11.0	5.31	23	1	2	--	--	
DEC.									
11...	1230	--	--	--	170	628	72	--	
FEb., 1975									
05...	1535	--	7.32	A1430	--	--	--	--	
05...	1610	5.5	7.25	1350	260	1290	--	--	
05...	1630	--	7.25	1350	--	--	--	4090	
14...	1030	--	7.40	A2010	--	--	--	--	
14...	1120	7.0	7.30	1850	200	876	56	--	
14...	1130	7.0	7.30	1850	--	863	60	--	
14...	1200	--	7.30	1850	--	--	--	6430	
28...	1615	--	6.32	475	95	211	95	--	
MAR.									
03...	1115	9.5	6.76	780	160	415	89	--	
07...	1510	9.5	6.47	560	210	570	86	--	
19...	1410	--	9.35	5400	650	2120	86	--	
20...	1620	--	8.06	2700	340	904	--	--	
22...	1030	--	7.93	A2480	--	--	--	--	
22...	1310	6.5	7.85	2350	--	1830	60	--	
22...	1315	6.5	7.85	2150	380	1750	59	--	
22...	1350	--	7.85	2350	--	--	--	14700	
APR.									
10...	1515	10.0	7.03	1150	30	83	62	--	
JULY									
30...	1245	--	5.61	98	?	3	--	--	
31...	0030	20.0	5.60	94	?	3	--	--	
31...	1215	21.5	5.59	91	1	2	--	--	

TABLE 6.--Water temperature, stage, instantaneous discharge, turbidity, suspended-sediment concentration and sieve diameter percentage finer than 0.062 mm, and bedload discharge--Continued

DATE	TIME	TEMPER- ATURE (DEG C)	STAGE ABOVE DATUM	INSTAN- TANEOUS DIS- CHARGE (FT ³ /S)	TUR- BID- ITY (JTU)	SUS- PENDED SED- IMENT (MG/L)	SUS. SED.	SIEVF DIAM.	SEDI- MENT BEDLOAD						
							% FINER THAN .062 MM	DIS- CHARGE (T/DAY)							
11482110 LACKS CREEK NEAR ORICK															
NOV., 1974															
14...	1015	10.5	5.42	A1.4	--	--	--	--	--						
22...	0945	7.0	6.00	20	15	12	--	--	--						
JAN., 1975															
16...	1050	6.0	6.63	A69	--	--	--	--	--						
16...	1110	6.0	6.63	67	10	13	89	--	--						
16...	1115	6.0	6.63	67	--	16	82	--	--						
FEB.															
05...	0200	7.0	8.85	573	35	88	75	--	--						
05...	1030	7.0	7.84	240	35	72	--	--	--						
05...	1350	6.0	7.90	255	150	464	83	--	--						
05...	1425	6.0	8.00	280	150	419	78	--	--						
05...	1430	6.0	8.00	280	--	502	74	--	--						
05...	1455	6.0	7.99	A279	--	--	--	--	--						
05...	1500	7.0	8.14	322	80	278	--	--	--						
06...	1800	8.0	7.95	268	45	106	--	--	--						
06...	2030	8.0	7.97	273	40	114	--	--	--						
07...	1000	8.0	8.13	319	35	95	--	--	--						
08...	0945	8.0	8.00	280	25	62	--	--	--						
08...	1700	8.0	8.00	280	30	72	--	--	--						
09...	1400	7.0	8.51	439	60	323	--	--	--						
09...	2400	7.0	8.87	582	95	493	--	--	--						
12...	1200	9.0	10.53	1730	700	3900	60	--	--						
12...	1600	9.0	10.50	1700	460	3440	--	--	--						
12...	1930	8.5	9.70	1030	270	3680	--	--	--						
13...	1200	9.0	9.63	980	220	1440	--	--	--						
13...	1500	8.0	9.50	900	140	658	--	--	--						
13...	1700	--	9.35	818	150	377	--	--	--						
14...	1200	7.5	8.45	A73	550	186	--	--	--						
19...	1135	9.0	10.57	A1460	--	--	--	--	--						
19...	1210	9.0	10.62	1820	1100	6100	67	--	--						
19...	1215	9.0	10.62	1820	--	5880	--	--	--						
MAR.															
12...	1530	10.0	--	--	9	24	--	--	--						
20...	1420	--	9.05	A450	--	--	--	--	--						
20...	1425	--	9.10	490	--	1780	64	--	--						
20...	1430	--	9.10	490	450	1820	62	--	--						
APR.															
01...	1115	7.5	7.36	A73	30	56	91	--	--						
01...	1145	7.5	7.37	77	30	40	93	--	--						
JUN.															
04...	1110	18.0	6.30	A9.6	--	--	--	--	--						
SEP.															
16...	1210	20.5	6.16	A.71	--	--	--	--	--						
11482120 REDWOOD CREEK ABOVE PANTHER CREEK, NEAR ORICK															
JULY, 1974															
18...	1535	--	--	A31	--	--	--	--	--						
18...	1600	25.0	--	31	30	34	--	--	--						
NOV.															
21...	1600	--	5.52	A46	--	--	--	--	--						
21...	1615	10.0	5.52	46	5	8	--	--	--						
22...	1010	--	6.23	A152	--	--	--	--	--						
22...	1025	8.0	6.23	152	160	289	--	--	--						
22...	1030	8.0	6.23	152	150	263	95	--	--						
22...	1050	8.0	6.23	152	--	--	--	76	--						
DEC.															
10...	1600	--	6.42	194	4	8	--	--	--						

TABLE 6.--Water temperature, stage, instantaneous discharge, turbidity, suspended-sediment concentration and sieve diameter percentage finer than 0.062 mm, and bedload discharge--Continued

DATE	TIME	TEMPER- ATURE (DEG C)	STAGE ABOVE DAMUM)	INSTAN- TANEOUS DIS- CHARGE (FT ³ /S)	TUR- BID- ITY (JTU)	SUS- PENDED SEDIMENT (MG/L)	STEVE DIAM. & FINER THAN .062 MM	SED- IMENT BEDLOAD DIS- CHARGE (T/DAY)					
						SUS.	SED.	MENT					
11482120 REDWOOD CREEK ABOVE PANTHER CREEK NEAR ORICK--CONTINUED													
FEB., 1975													
06...	1540	7.5	9.45	1740	--	440	67	--					
06...	1550	7.5	9.45	1740	120	519	64	--					
06...	1605	--	9.45	1740	--	--	--	3700					
04...	1030	--	12.10	A3430	--	--	--	--					
09...	1110	8.0	12.02	3400	--	1920	--	--					
09...	1115	8.0	12.02	3400	380	1760	64	--					
04...	1145	--	11.99	3400	--	--	--	4800					
13...	1515	--	13.38	A4840	--	--	--	--					
13...	1640	10.0	13.30	4650	--	1480	--	--					
13...	1645	10.0	13.30	4650	310	1640	58	--					
13...	1705	--	13.30	4650	--	--	--	4420					
24...	1235	9.5	9.53	1530	110	267	86	--					
MAR.													
03...	1100	9.0	9.73	1600	200	469	90	--					
APR.													
10...	1315	9.0	8.72	1060	30	134	42	--					
14...	1235	8.0	8.52	970	45	33	65	--					
JULY													
30...	1200	21.0	--	66	1	2	--	--					
30...	2400	19.0	5.68	64	1	2	--	--					
31...	1200	21.0	5.69	64	1	2	61	--					
11482140 HIGH-SLOPE SCHIST CREEK NEAR ORICK													
JULY, 1974													
23...	1145	12.5	2.30	.20	0	3	55	--					
23...	1155	--	2.30	A.20	--	--	--	--					
SEP.													
22...	1305	--	2.14	A.10	--	--	--	--					
JAN., 1975													
15...	1515	8.5	2.78	4.0	1	6	54	--					
15...	1530	--	2.78	A4.0	--	--	--	--					
FEB.													
18...	1250	--	2.99	A6.3	--	--	--	--					
18...	1300	8.0	2.99	6.3	1	1	--	--					
19...	C1200	--	3.41	20	86	25	54	--					
MAR.													
07...	1145	9.0	2.78	3.4	1	1	--	--					
07...	1225	--	2.79	A3.4	--	--	--	--					
21...	1300	--	2.68	A23	--	--	--	--					
21...	1305	7.0	2.75	30	3	12	--	--					
21...	1335	7.0	2.72	27	2	7	--	--					
21...	1350	7.0	2.74	29	3	10	--	--					
MAY													
20...	1230	8.5	2.52	1.2	1	2	--	--					
20...	1250	8.5	2.52	A1.2	--	--	--	--					
11482160 COPPER CREEK NEAR ORICK													
APR., 1974													
16...	1310	10.5	2.21	4.6	15	19	--	--					
DEC.													
14...	C1200	--	--	23	800	2940	75	--					
20...	1330	10.5	2.03	A8.1	--	--	--	--					
JAN., 1975													
05...	C1800	--	--	134	2000	7300	83	--					
14...	1030	6.5	2.23	A11	--	--	--	--					
14...	1100	6.5	2.23	11	20	45	86	--					

TABLE 6.--Water temperature, stage, instantaneous discharge, turbidity, suspended-sediment concentration and sieve diameter percentage finer than 0.062 mm, and bedload discharge--Continued

DATE	TIME	TEMPERATURE (DEG C)	STAGE (FT ABOVE DATUM)	INSTANTANEOUS DISCHARGE (FT ³ /S)	TURBIDITY (JTU)	SUSPENDED SEDIMENT (MG/L)	STEVE DIAM. % FINER THAN .062 MM	SEDIMENT LOAD (T/DAY)						
						SUS. SED.	DIS-							
11482160 COPPER CREEK NEAR ORICK--CONTINUED														
FEB., 1975														
11...	1350	--	3.30	37	40	117	77	--						
18...	1430	8.5	2.56	20	--	--	--	--						
18...	1445	--	2.56	20	50	--	--	--						
19...	C1200	--	--	135	2000	10400	72	--						
24...	1515	10.0	--	E10	45	74	93	--						
MAR.														
13...	1310	--	2.64	A12	--	--	--	--						
13...	1330	8.0	2.64	12	--	46	93	--						
20...	1310	--	8.73	A54	--	--	--	--						
20...	1320	7.5	8.73	54	650	1840	78	--						
APR.														
10...	1200	--	5.21	7.4	280	813	96	--						
MAY														
06...	1100	10.5	5.58	9.3	40	134	91	--						
06...	1125	--	5.58	A9.3	--	--	--	--						
11482190 SLIDE CREEK NEAR ORICK														
APR., 1974														
23...	1300	9.0	2.15	2.1	6	11	--	--						
23...	1320	--	2.15	A2.1	--	--	--	--						
JULY														
18...	1940	--	1.89	A.46	--	--	--	--						
19...	0800	--	1.89	A.52	--	--	--	--						
SEP.														
13...	1140	--	--	A.85	--	--	--	--						
13...	1200	14.0	--	--	1	1	--	--						
NOV.														
21...	1515	10.5	2.58	3.8	6	18	73	--						
DEC.														
14...	C1200	--	3.31	20	950	2920	79	--						
18...	1315	--	2.96	6.0	65	123	94	--						
18...	1340	--	2.96	A6.0	--	--	--	--						
JAN., 1975														
05...	C1200	--	3.31	20	380	1780	66	--						
14...	1245	7.5	3.04	A5.9	10	19	70	--						
FEB.														
07...	1220	9.0	3.23	13	25	64	83	--						
11...	1310	9.5	3.42	35	20	42	83	--						
13...	1545	9.0	3.42	35	55	221	62	--						
14...	0835	--	3.35	A29	--	--	--	--						
14...	0900	7.0	3.85	65	25	115	65	--						
18...	1215	--	3.02	A3.9	--	--	--	--						
18...	1230	8.5	3.02	3.9	15	26	83	--						
19...	C1200	--	4.36	170	2800	10000	81	--						
24...	1350	9.0	2.88	2.9	15	24	84	--						
MAR.														
13...	1100	--	2.83	A5.9	--	--	--	--						
13...	1130	7.0	2.83	5.9	10	20	89	--						
19...	1230	9.5	--	--	3500	12200	--	--						
19...	1345	--	--	A66	--	--	--	--						
MAY														
06...	1350	--	--	A3.7	--	--	--	--						
06...	1420	11.0	--	3.7	15	27	84	--						

TABLE 6.--Water temperature, stage, instantaneous discharge, turbidity, suspended-sediment concentration and sieve diameter percentage finer than 0.062 mm, and bedload discharge--Continued

DATE	TIME	TEMPER- ATURE (DEG C)	STAGE (FT ABOVE DATUM)	INSTAN- TANEOUS DIS- CHARGE (FT ³ /S)	TURB- IDITY (JTU)	SUS. PENEDO SEDIMENT	STEVE DTAM.	SEDI- MENT					
						PENEDO SEDIMENT (MG/L)	% FINER THAN 0.062 MM	REDLOAD DIS- CHARGE (T/DAY)					
11482200 - REDWOOD CREEK AT SOUTH PARK BOUNDARY NEAR ORICK													
MAY , 1974													
17...	1330	12.0	4.71	A237	7	19	88	.00					
JUNE													
27...	1240	19.0	3.75	A59	1	2	--	--					
JULY													
18...	1540	--	3.63	A40	--	--	--	--					
18...	2125	--	3.63	A38	--	--	--	--					
19...	1050	--	3.63	A40	--	--	--	--					
19...	1220	22.0	3.63	40	1	8	--	--					
22...	1250	--	3.64	A35	--	--	--	--					
22...	1330	--	3.64	35	1	10	--	--					
SEP.													
06...	1400	22.0	--	12	--	1	--	--					
10...	1340	--	3.71	A12	--	--	--	--					
10...	1755	--	3.70	A11	--	--	--	--					
11...	0026	--	3.72	A12	--	--	--	--					
11...	0645	--	3.70	A12	--	--	--	--					
11...	1205	--	3.62	A11	--	--	--	--					
11...	1240	20.5	3.62	11	2	6	--	--					
13...	1330	19.0	--	10	--	4	--	--					
NOV.													
07...	0110	--	--	A18	--	--	--	--					
07...	0135	11.5	--	18	--	1	3	--					
07...	1315	12.0	--	57	--	70	106	--					
07...	1330	--	--	A57	--	--	--	--					
08...	0950	--	--	A67	--	--	--	--					
09...	1010	9.5	--	67	--	5	9	--					
20...	2350	--	4.05	A63	--	--	--	--					
21...	0015	10.5	4.05	63	2	6	--	--					
21...	1430	11.0	4.10	67	7	17	--	--					
21...	1445	--	4.10	A57	--	--	--	--					
21...	1530	11.0	4.15	72	15	30	--	--					
21...	1630	10.5	4.22	80	30	50	--	--					
21...	2030	10.0	4.41	102	60	97	--	--					
21...	2050	--	4.43	A105	--	--	--	--					
22...	1115	9.5	4.49	212	75	193	--	--					
22...	1155	--	4.89	A180	--	--	--	--					
FEB., 1975													
05...	1700	--	8.14	A2820	--	--	--	--					
05...	1745	6.0	8.30	3000	420	1710	--	--					
06...	1115	--	7.82	A2030	--	--	--	--					
06...	1215	7.0	7.82	2030	130	739	38	--					
06...	1620	--	7.82	A2140	--	--	--	--					
06...	1710	8.0	7.84	2150	130	570	--	--					
07...	0910	--	8.36	A2600	--	--	--	--					
07...	1115	--	8.36	2600	--	--	--	4620					
07...	1155	7.0	8.34	2580	190	1030	45	--					
09...	0810	7.0	10.46	4770	550	2830	--	--					
09...	1010	7.0	10.35	4610	--	--	--	6900					
12...	1525	8.5	13.53	8130	800	3830	--	--					
13...	1225	--	12.76	A7180	--	--	--	--					
13...	1330	8.0	12.80	7150	380	1910	54	--					
13...	1400	8.0	12.79	7180	--	--	--	3430					
13...	1630	8.0	12.78	6450	260	1490	--	--					
14...	1020	--	10.69	A4450	--	--	--	--					
14...	1130	6.5	10.59	4360	210	1470	39	--					

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TABLE 6.--Water temperature, stage, instantaneous discharge, turbidity,
suspended-sediment concentration and sieve diameter percentage finer
than 0.062 mm, and bedload discharge--Continued

DATE	TIME	TEMPER- ATURE (DEG C)	STAGE (FT ABOVE DATUM)	INSTANTANEOUS	TUR- BID- ITY	SUS- PENDED	SUS. SED.	SUS. STEVE	SEDIMENT			
				DIS- CHARGE (FT ³ /S)	(JTU)	SEDIMENT (MG/L)	% FINER THAN 0.062 MM	REDLOAD (T/DAY)				
11482200 REDWOOD CREEK AT SOUTH PARK BOUNDARY NEAR ORICK--CONTINUED												
JULY, 1975												
30...	1315	22.0	1.72	A35	--	--	--	--	--			
30...	1345	--	1.72	34	2	14	--	--	--			
30...	1600	22.0	1.72	A36	--	--	--	--	--			
30...	2015	20.0	1.71	A30	--	--	--	--	--			
30...	2400	18.5	1.71	A33	--	--	--	--	--			
31...	0010	--	1.71	33	2	8	57	--	--			
31...	0400	17.5	1.71	A34	--	--	--	--	--			
31...	0805	17.0	1.71	A31	--	--	--	--	--			
31...	1200	21.0	1.71	A33	--	--	--	--	--			
31...	1210	--	1.71	33	2	10	46	--	--			
11482210 - BRIDGE CREEK NEAR ORICK												
APR., 1974												
26...	1025	9.0	1.90	31	4	5	--	--	--			
26...	1045	--	1.90	A31	--	--	--	--	--			
JULY												
23...	1130	17.5	1.55	A4.2	--	--	--	--	--			
23...	1230	17.5	--	4.2	1	3	--	--	--			
AUG.												
04...	1230	--	1.55	A2.2	--	--	--	--	--			
SEP.												
10...	1515	--	--	A1.7	--	--	--	--	--			
JAN., 1975												
09...	1315	--	2.19	A230	--	--	--	--	--			
09...	1345	--	2.19	230	--	--	--	--	172			
09...	1400	7.0	2.19	230	55	236	64	--	--			
22...	1415	--	1.33	A38	--	--	--	--	--			
FEB.												
08...	1115	--	1.60	A90	--	--	--	--	--			
08...	1130	9.0	1.60	90	8	35	76	--	--			
13...	1340	--	2.40	285	77	589	--	--	--			
24...	1320	9.5	--	--	10	41	75	--	--			
MAR.												
03...	1400	--	1.35	A82	--	--	--	--	--			
03...	1430	10.0	1.35	82	7	22	63	--	--			
26...	1325	9.0	8.54	200	700	4620	--	--	--			
26...	1330	9.0	8.54	200	--	4310	43	--	--			
26...	1405	--	9.05	A297	--	--	--	--	--			
APR.												
02...	1320	--	7.65	A68	--	--	--	--	--			
02...	1340	--	7.65	68	150	963	43	--	--			
MAY												
21...	1130	13.0	6.52	74	3	8	79	--	--			
21...	1150	--	6.52	A24	--	--	--	--	--			
11482220 REDWOOD CREEK ABOVE HARRY WIER CREEK NEAR ORICK												
AUG., 1974												
09...	1600	--	--	A25	--	--	--	--	--			
OCT.												
28...	1440	--	--	--	20	53	59	--	--			

TABLE 6.--Water temperature, stage, instantaneous discharge, turbidity, suspended-sediment concentration and sieve diameter percentage finer than 0.062 mm, and bedload discharge--Continued

DATE	TIME	TEMPER- (DFG. C)	STAGE (FT) ABOVE DATUM)	INSTAN- TANEOUS DIS- CHARGE (CFT ³ /S)	TUR- BID- ITY (JTU)	SUS- PENDED SOLU- TION (MG/L)	SUS. SED. SIFVF DIAM. % FINER THAN .062 MM	SEDI- MENT BEDLOAD DIS- CHARGE (T/DAY)					
11482220 REDWOOD CREEK ABOVE HARRY WIER CREEK NEAR ORICK--CONTINUED													
NOV., 1974													
07...	0230	--	--	A18	--	--	--	--					
07...	0300	11.5	--	--	1	3	--	--					
07...	1245	--	--	A60	--	--	--	--					
07...	1315	11.0	6.02	60	40	65	82	--					
08...	0845	--	5.64	A59	--	--	--	--					
08...	0900	10.0	5.64	59	4	10	58	--					
21...	0900	--	--	A58	--	--	--	--					
21...	0930	11.0	5.60	50	1	12	71	--					
21...	1940	--	--	A111	--	--	--	--					
21...	2020	11.0	6.02	110	55	101	90	--					
22...	0915	--	--	A165	--	--	--	--					
22...	0950	9.0	6.45	165	30	89	67	--					
FEB., 1975													
05...	1710	--	--	--	400	1620	64	--					
07...	1020	--	9.55	A2600	--	--	--	--					
07...	1215	7.5	9.55	2600	160	675	--	--					
07...	1240	7.5	9.55	2600	--	--	--	4700					
09...	0940	--	10.75	A4300	--	--	--	--					
09...	1030	8.0	10.72	4300	550	2140	68	--					
09...	1130	--	10.72	4300	--	--	--	1360					
12...	1440	--	12.64	8600	700	3840	--	--					
13...	1430	--	11.60	A6030	--	--	--	--					
13...	1525	--	11.60	6030	350	1750	--	--					
13...	1600	--	11.60	6030	--	--	--	18200					
14...	0845	--	10.80	4600	220	1150	--	--					
MAR.													
21...	1310	--	11.98	6900	1100	3630	73	--					
JULY													
30...	1300	21.5	10.52	36	1	2	--	--					
31...	0045	17.5	10.54	36	1	6	--	--					
31...	1240	22.0	10.53	36	1	6	--	--					
11482225 HARRY WIER CREEK NEAR ORICK													
APR., 1974													
12...	1500	10.0	8.20	A12	--	--	--	--					
12...	1530	10.0	8.20	12	10	11	95	--					
18...	1400	--	8.00	4.1	5	9	--	--					
18...	1630	--	--	A4.1	--	--	--	--					
JULY													
02...	1510	13.5	7.69	A.63	--	--	--	--					
18...	1900	14.0	--	A.43	--	--	--	--					
18...	2000	14.0	--	A.43	--	--	--	--					
18...	2100	14.0	--	A.43	--	--	--	--					
18...	2200	14.0	--	A.43	--	--	--	--					
18...	2300	14.0	--	A.43	--	--	--	--					
18...	2400	14.0	--	A.43	--	--	--	--					
19...	0100	14.0	--	A.43	--	--	--	--					
19...	0200	14.0	--	A.43	--	--	--	--					
19...	0400	14.0	--	A.43	--	--	--	--					
19...	0500	14.0	--	A.43	--	--	--	--					
19...	0600	14.0	--	A.43	--	--	--	--					
19...	0700	14.5	--	A.43	--	--	--	--					
19...	0800	14.0	--	A.43	--	--	--	--					
19...	0900	14.0	--	A.43	--	--	--	--					
19...	1000	14.0	--	A.43	--	--	--	--					
19...	1200	14.0	7.66	.43	1	3	--	--					
23...	1410	--	7.84	A.34	--	--	--	--					
23...	1420	--	7.84	.34	2	2	--	--					

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TABLE 6.--Water temperature, stage, instantaneous discharge, turbidity, suspended-sediment concentration and sieve diameter percentage finer than 0.062 mm, and bedload discharge--Continued

DATE	TIME	TEMPER- (DEG C)	STAGE (FT) ABOVE DAM	INSTAN- TANEOUS DIS- CHARGE (FT ³ /S)	TUR- BID- TTY (JTU)	SUS- PENDED SEND- MENT (MG/L)	SUS. STEVF DIAM. % FINER THAN .062 MM	SFD. MEN ^T BEDLOAD DIS- CHARGE (T/DAY)
						SUS. STEVF DIAM. % FINER THAN .062 MM	SFD. MEN ^T BEDLOAD DIS- CHARGE (T/DAY)	
11482225 HARRY WIER CREEK NEAR ORICK--CONTINUED								
AUG., 1974								
04...	1210	--	--	A.27	--	--	--	--
SFP.								
10...	1200	--	--	A.04	--	--	--	--
10...	1400	14.5	--	A.04	--	--	--	--
10...	1500	14.5	--	A.04	--	--	--	--
10...	1600	14.5	--	A.04	--	--	--	--
10...	1700	14.5	--	A.03	--	--	--	--
10...	1800	14.0	--	A.03	--	--	--	--
10...	1900	14.0	--	A.03	--	--	--	--
10...	2000	14.0	--	A.04	--	--	--	--
10...	2100	14.0	--	A.04	--	--	--	--
10...	2200	14.0	--	A.04	--	--	--	--
10...	2300	14.0	--	A.04	--	--	--	--
10...	2400	14.0	--	A.04	--	--	--	--
11...	0100	--	--	A.04	--	--	--	--
11...	0200	13.5	--	A.04	--	--	--	--
11...	0300	13.5	--	A.04	--	--	--	--
11...	0400	13.5	--	A.04	--	--	--	--
11...	0600	13.5	--	A.04	--	--	--	--
11...	0700	13.5	--	A.04	--	--	--	--
11...	0800	13.0	--	A.04	--	--	--	--
11...	0900	13.0	--	A.04	--	--	--	--
11...	1000	13.5	--	A.04	--	--	--	--
11...	1100	13.5	--	A.04	--	--	--	--
11...	1200	13.5	2.78	A.04	1	7	25	--
16...	1330	13.0	--	A.17	--	--	--	--
16...	1410	13.0	--	.17	2	10	--	--
CCT.								
28...	1430	--	8.00	1.7	8	75	25	--
NOV.								
06...	2215	--	7.61	A.17	--	--	--	--
07...	0130	9.0	7.61	.17	1	7	--	--
07...	0600	--	7.82	A.41	--	--	--	--
07...	0615	9.0	7.86	.41	1	4	--	--
07...	0725	--	7.90	A.82	--	--	--	--
07...	0745	9.5	7.93	1.1	3	8	59	--
07...	1045	--	8.06	A.2.9	--	--	--	--
07...	1100	10.0	8.08	3.0	60	85	96	--
07...	1505	--	8.04	A2.9	--	--	--	--
07...	1520	10.0	8.03	2.7	20	28	97	--
07...	1725	--	7.95	A2.1	--	--	--	--
07...	1800	9.5	7.97	2.0	9	15	89	--
08...	0735	--	7.83	A.80	--	--	--	--
08...	0750	9.0	7.83	.79	2	6	--	--
20...	2040	10.0	7.80	.54	1	2	--	--
20...	2115	--	7.80	A.55	--	--	--	--
21...	1145	--	7.80	A.50	--	--	--	--
21...	1200	10.0	7.80	.50	1	1	--	--
21...	1410	--	7.86	A.95	--	--	--	--
21...	1420	10.0	7.86	1.1	2	6	--	--
21...	1630	--	8.08	A2.9	--	--	--	--
21...	1650	10.0	8.10	5.5	60	137	73	--
21...	1815	--	8.19	A7.7	--	--	--	--
21...	1820	10.0	8.21	8.2	160	263	87	--

TABLE 6.--Water temperature, stage, instantaneous discharge, turbidity, suspended-sediment concentration and sieve diameter percentage finer than 0.062 mm, and bedload discharge--Continued

DATE	TIME	TEMPERATURE (DEG. C)	STAGE (FT ABOVE Gauge)	INSTANTANEOUS DIS- CHARGE (CFT ³ /S)	TURB- ITY (NTU)	SUS- PENDED SEDIMENT (MG/L)	SUS. SED. MENT	BEDLOAD DIS- CHARGE (L/DAY/L)
							STFVF	
11482225 HARRY WIER CREEK NEAR ORICK--CONTINUED								
NOV., 1974								
21...	2310	--	8.02	A4.2	--	--	--	--
21...	2330	9.5	8.02	4.1	35	36	95	--
22...	0100	--	7.96	A3.1	--	--	--	--
22...	0115	9.0	7.96	3.1	15	15	89	--
22...	0600	8.5	7.91	A2.4	--	--	--	--
22...	0810	8.5	7.91	2.4	10	7	94	--
JAN., 1975								
05...	01400	--	02.71	--	350	918	97	--
17...	1215	--	7.46	A10	--	--	--	--
17...	1230	8.0	7.46	10	35	44	95	--
FEB.								
05...	1700	--	8.20	A46	--	--	--	--
05...	1825	7.5	8.20	42	15	80	45	--
06...	1045	8.0	8.05	31	15	31	79	--
06...	1530	--	8.05	A31	--	--	--	--
06...	1600	8.5	8.05	31	15	27	83	--
08...	0900	8.5	7.92	A23	--	--	--	--
08...	0920	8.5	7.92	23	10	19	79	--
08...	2045	--	7.98	A23	--	--	--	--
08...	2055	9.5	7.98	23	45	65	82	--
08...	2315	--	8.15	A37	--	--	--	--
08...	2330	8.5	8.15	40	100	270	89	1.3
09...	0120	--	8.18	A43	--	--	--	--
09...	0130	9.0	8.18	42	65	56	94	--
09...	0450	--	--	A39	--	--	--	--
09...	0455	9.0	--	38	30	54	84	--
09...	0415	--	--	A32	--	--	--	--
09...	0525	9.0	8.50	32	20	33	67	--
09...	1200	--	8.26	A29	--	--	--	--
09...	1205	9.0	8.26	29	15	23	77	--
12...	1310	--	F.41	69	50	144	69	--
12...	1315	--	--	A69	--	--	--	--
12...	1615	--	F.41	69	35	83	75	--
12...	2010	10.0	F.43	73	95	165	87	--
12...	2120	--	F.49	A94	--	--	--	--
12...	2130	10.0	F.49	97	330	807	82	30
12...	2150	10.0	F1.06	102	--	--	--	--
12...	2215	10.0	F1.12	104	170	570	57	--
13...	0020	--	F1.14	A115	--	--	--	--
13...	0030	9.5	F1.14	113	130	445	67	--
13...	0035	9.5	F1.14	112	--	--	--	26
13...	0230	--	F1.06	A99	--	--	--	--
13...	0245	9.0	F1.06	98	60	272	46	--
13...	0250	9.5	F1.06	99	--	--	--	16
13...	0540	--	F1.04	A104	--	--	--	--
13...	0550	9.5	F1.04	94	45	158	59	--
13...	0555	9.5	F1.04	98	--	--	--	10
13...	0625	--	F1.07	A90	--	--	--	--
13...	0845	9.5	F1.07	92	40	82	43	--
13...	1015	9.5	F1.05	98	45	123	69	--
13...	1215	--	F.98	A91	--	--	--	--
13...	1230	9.0	F.98	96	35	88	75	--
13...	1240	9.0	F.98	89	--	--	--	1.1
13...	1710	--	F.91	A73	--	--	--	--
13...	1720	9.0	F.91	74	25	75	62	--
14...	0115	--	F.81	A66	--	--	--	--
14...	0120	8.0	F.81	62	20	52	76	--
14...	0450	--	F.52	A53	--	--	--	--
14...	1000	7.5	F.76	53	15	33	69	--
24...	1500	9.5	F.60	33	30	--	--	--

TABLE 6.--Water temperature, stage, instantaneous discharge, turbidity, suspended-sediment concentration and sieve diameter percentage finer than 0.062 mm, and bedload discharge--Continued

COT- MENT DLOAD DIS- ARGE /DAY)	DATE	TIME	TEMPER- ATURE (DEG C)	STAGE ABOVE DATUM)	INSTAN- TANEOUS DIS- CHARGE (FT ³ /S)	TUR- BID- ITY (JTU)	SUS- PENDED SEDIM- ENT (MG/L)	SUS. SUS. SEDIM- ENT THAN .062 MM	SUS. SEDIM- ENT BEDLOAD DIS- CHARGE (T/DAY)						
11482225 HARRY WIER CREEK NEAR ORICK--CONTINUED															
MAY, 1975															
	21...	1250	--	--	--	850	4080	65	--						
	APR.														
	03...	1045	7.0	9.82	11	180	357	99	--						
	03...	1100	--	9.82	A11	--	--	--	--						
	MAY														
	21...	1550	11.0	9.16	3.5	9	11	--	--						
	21...	1615	--	9.16	A3.5	--	--	--	--						
	JUNE														
	01...	1430	--	9.10	A1.9	--	--	--	--						
	01...	1450	12.5	9.10	1.9	5	16	72	--						
	07...	1315	--	9.10	A1.6	--	--	--	--						
	07...	1330	12.0	9.10	1.6	4	6	--	--						
	JULY														
	30...	1900	--	8.92	A.33	--	--	--	--						
	30...	2320	--	8.92	A.35	--	--	--	--						
	31...	0315	--	8.92	A.33	--	--	--	--						
	31...	0715	--	8.91	A.31	--	--	--	--						
	31...	1115	--	8.91	A.28	--	--	--	--						
	31...	1130	12.5	8.91	.30	2	9	--	--						
11482230 TOM MCDONALD CREEK NEAR ORICK															
	APR., 1974														
	26...	1305	8.5	1.40	22	4	5	--	--						
	26...	1320	--	1.37	A20	--	--	--	--						
	JULY														
	02...	1340	--	1.04	A3.6	--	--	--	--						
	23...	1430	--	--	A2.5	--	--	--	--						
	23...	1500	--	--	2.5	1	4	--	--						
	23...	1505	--	--	2.5	1	2	--	--						
	AUG.														
	08...	1115	--	1.88	A2.4	--	--	--	--						
	SEP.														
	11...	1145	--	.97	A1.2	--	--	--	--						
	11...	1200	15.0	.97	1.2	1	1	--	--						
	OCT.														
	28...	1630	--	1.80	61	60	60	96	--						
	JAN., 1975														
	05...	01200	--	2.21	125	320	989	80	--						
	09...	1550	--	2.13	A103	--	--	--	--						
	09...	1600	7.0	2.14	115	15	40	71	--						
	09...	1615	--	2.16	115	--	--	--	11						
	FEB.														
	11...	1100	9.0	2.05	98	6	23	71	--						
	19...	1045	9.0	4.57	550	430	1300	82	--						
	20...	1115	7.0	--	177	25	124	62	--						
	20...	1130	--	2.48	A177	--	--	--	--						
	MAR.														
	04...	1400	--	2.05	A47	--	--	--	--						
	04...	1440	9.0	--	--	3	14	--	--						
	APR.														
	02...	1240	--	1.41	A52	--	--	--	--						
	02...	1320	--	1.54	63	--	--	--	2.6						
	02...	1340	9.0	1.54	63	10	48	47	--						
	MAY														
	14...	1105	10.5	1.62	18	2	7	--	--						
	14...	1115	--	1.02	A18	--	--	--	--						
11482246 FORTYFOUR CREEK NEAR ORICK															
	MAY, 1974														
	08...	1430	11.5	2.76	6.6	6	16	65	--						
	08...	1445	--	2.76	A6.6	--	--	--	--						

TABLE 6.--Water temperature, stage, instantaneous discharge, turbidity, suspended-sediment concentration and sieve diameter percentage finer than 0.062 mm, and bedload discharge--Continued

DATE	TIME	TEMPER- ATURE (DEG C)	STAGE (FT ABOVE DATUM)	INSTANTANEOUS DIS- CHARGE (CFT ³ /S)	TUR- BID- ITY (JNTU)	SUS- PENDED SEDT- MNT (MG/L)	SUS. SEN. STEVE DIAM. .062 MM	SED- IMENT BEDLOAD DIS- CHARGE (T/DAY)
						% FINER THAN 0.062 MM		
11482240 FORTYFOUR CREEK NEAR ORICK--CONTINUED								
JULY, 1974								
02...	1210	--	2.54	A2.2	--	--	--	--
23...	1145	--	2.49	A1.6	--	--	--	--
23...	1210	--	2.49	1.6	7	10	52	--
23...	1215	--	2.49	1.6	4	9	46	--
AUG.								
09...	1100	--	--	A2.2	--	--	--	--
09...	1120	13.5	--	--	3	6	61	--
DEC.								
21...	1230	--	3.30	21	120	210	75	--
JAN., 1975								
10...	1315	9.0	3.68	41	9	36	40	--
10...	1340	--	3.68	A41	--	--	--	--
FEB.								
11...	1155	--	3.50	28	7	20	68	--
24...	1400	9.0	3.58	33	8	30	63	--
MAR.								
04...	1145	9.0	3.14	A19	6	16	51	--
18...	1200	--	7.53	400	2100	6040	79	--
25...	1435	--	2.12	A95	--	--	--	--
25...	1510	9.5	2.12	95	--	--	--	8.6
25...	1520	9.5	2.12	95	35	155	--	--
25...	1525	9.5	2.12	95	--	144	64	--
APR.								
03...	1345	--	1.31	A28	--	--	--	--
03...	1415	7.0	1.31	28	10	6	26	--
MAY								
13...	1050	10.5	.86	8.8	4	6	--	--
13...	1120	--	.86	A8.8	--	--	--	--
AUG.								
11...	1840	14.0	.51	.70	2	2	--	--
11482250 MILLER CREEK NEAR ORICK								
APR., 1974								
25...	1030	7.5	19.80	--	9	9	--	.00
25...	1040	--	19.80	A1.0	--	--	--	--
JULY								
03...	0930	12.0	19.84	A.71	--	--	--	--
18...	1400	14.0	19.91	A.02	--	--	--	--
18...	1500	14.0	19.91	A.03	--	--	--	--
18...	1600	14.0	19.91	A.03	--	--	--	--
18...	1800	14.0	19.91	A.03	--	--	--	--
18...	2000	14.0	19.92	A.04	--	--	--	--
18...	2200	14.0	19.92	A.03	--	--	--	--
18...	2400	13.5	19.92	A.03	--	--	--	--
19...	0100	13.5	19.92	A.03	--	--	--	--
19...	0200	13.5	19.92	A.03	--	--	--	--
19...	0300	13.5	19.92	A.03	--	--	--	--
19...	0500	13.5	19.92	A.03	--	--	--	--
19...	0700	13.0	19.92	A.03	--	--	--	--
19...	0900	13.5	19.92	A.03	--	--	--	--
19...	0900	13.0	19.92	A.03	--	--	--	--
19...	1000	13.0	19.92	A.03	--	--	--	--
19...	1200	14.0	19.92	A.02	1	4	--	--
24...	1250	15.0	--	--	5	12	--	--
24...	1300	15.0	--	E.05	--	--	--	--

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TABLE 6.--Water temperature, stage, instantaneous discharge, turbidity, suspended-sediment concentration and sieve diameter percentage finer than 0.062 mm, and bedload discharge--Continued

DATE	TIME	TEMPER- ATURE (DEG C)	STAGE (FT) ABOVE GAGING POINT	INSTAN- TANEOUS DIS- CHARGE (CFT ³ /S)	TUR- BID- ITY (NTU)	SUS- PENDED SEDIMENT (MG/L)	SUS.	SFD.	SEDI- MEN-
							PENED	SEDIMENT	% FINER THAN .062 MM
11482250 MILLER CREEK NEAR ORICK--CONTINUED									
SEP., 1974									
10...	1200	13.0	19.90	A.04	--	--	--	--	--
10...	1400	13.5	--	A.04	--	--	--	--	--
10...	1600	14.0	--	A.03	--	--	--	--	--
10...	1800	13.5	--	A.03	--	--	--	--	--
10...	2000	13.5	--	A.03	--	--	--	--	--
10...	2200	14.0	--	A.03	--	--	--	--	--
10...	2400	14.0	--	A.05	--	--	--	--	--
11...	0400	12.5	--	A.05	--	--	--	--	--
11...	0600	12.5	--	A.05	--	--	--	--	--
11...	0800	12.5	--	A.05	--	--	--	--	--
11...	1000	12.5	--	A.04	--	--	--	--	--
11...	1200	13.0	19.90	A.04	1	2	--	--	--
17...	1430	12.0	19.92	.03	3	7	--	.00	--
17...	1445	--	19.92	A.04	--	--	--	--	--
NOV.									
06...	2245	--	19.94	A.11	10	14	86	--	--
07...	0430	11.0	19.96	.14	4	7	71	--	--
07...	0455	--	19.96	A.14	--	--	--	--	--
07...	0730	--	20.11	1.2	190	249	92	--	--
07...	0830	--	20.08	A.59	--	--	--	--	--
07...	0900	--	20.07	A1.1	--	--	--	--	--
07...	1030	--	20.07	1.1	180	172	97	--	--
07...	1315	12.0	20.03	A.89	--	--	--	--	--
07...	1330	--	20.03	.89	80	59	100	--	--
07...	1645	10.0	20.03	.78	30	24	91	--	--
09...	0845	9.0	19.98	.43	8	8	--	--	--
08...	0850	--	19.98	A.43	--	--	--	--	--
20...	2200	10.0	19.90	.22	5	11	24	--	--
21...	0530	10.0	19.93	.28	25	16	98	--	--
21...	0830	10.0	19.91	.22	15	10	100	--	--
21...	1230	10.5	19.91	.27	10	10	91	--	--
21...	1455	9.5	20.20	4.6	800	915	100	--	--
21...	1515	--	--	A3.7	--	--	--	--	--
21...	1725	--	20.13	A2.5	--	--	--	--	--
21...	1745	9.5	20.13	2.4	210	176	96	--	--
21...	2210	9.5	20.08	1.4	35	25	94	--	--
21...	2215	--	--	A1.5	--	--	--	--	--
22...	1000	9.0	20.03	A.83	20	16	89	--	--
JAN., 1975									
20...	1530	9.0	20.38	1.9	9	8	89	--	--
20...	1540	--	--	A1.9	--	--	--	--	--
FEB.									
05...	1635	--	20.66	A8.2	--	--	--	--	--
05...	1700	8.0	20.66	8.3	30	56	81	--	--
06...	1310	--	20.62	A7.4	--	--	--	--	--
06...	1345	9.0	20.52	7.4	15	33	76	--	--
07...	1045	9.0	20.63	7.1	15	27	82	--	--
08...	2015	9.5	20.52	7.8	80	44	82	--	--
08...	2020	--	20.50	A7.0	--	--	--	--	--
08...	2145	9.5	20.77	8.5	--	--	--	--	1.1
09...	2230	9.5	20.71	9.6	130	273	83	--	--
09...	2245	--	20.71	A10	--	--	--	--	--
09...	0015	9.0	20.70	9.1	75	141	92	--	--
09...	0045	9.0	20.70	9.3	--	--	--	--	.00
09...	0140	--	20.70	A9.3	--	--	--	--	--
09...	0415	9.0	20.64	9.4	30	49	87	--	--
09...	0800	9.0	20.65	8.7	20	21	73	--	--

TABLE 6.--Water temperature, stage, instantaneous discharge, turbidity, suspended-sediment concentration and sieve diameter percentage finer than 0.062 mm, and bedload discharge--Continued

DATE	TIME	TEMPER- ATURE (DEG C)	STAGE FT ABOVE DATUM	INSTANTANEOUS DIS- CHARGE CFT ³ /S	TUR- BID- ITY JTU	SUS- PENDED SED- IMENT MEN- T	SUS. STEVE DIAM. % FINER MENT THAN .062 MM	SEDI- MENT BEDLOAD DIS- CHARGE (T/DAY)							
							SED.								
11482250 MILLER CREEK NEAR ORICK--CONTINUED															
FEB., 1975															
09...	0420	--	20.65	A9.3	--	--	--	--							
09...	1055	--	20.65	A7.7	--	--	--	--							
12...	1500	10.0	20.75	12	30	378	69	--							
12...	1510	10.0	20.75	12	--	--	--	2.2							
12...	1550	--	20.75	A12	--	--	--	--							
12...	1640	--	20.73	A12	--	--	--	--							
12...	1850	10.0	20.72	10	25	65	74	--							
12...	2100	--	20.86	17	--	--	--	--							
12...	2130	10.0	20.85	A17	90	245	78	3.9							
13...	0015	10.0	20.78	20	60	240	57	--							
13...	0025	10.0	20.78	20	--	--	--	3.0							
13...	0530	9.5	20.87	19	40	148	60	--							
13...	0905	9.5	20.89	20	--	--	--	2.9							
13...	0925	--	20.91	A21	--	--	--	--							
13...	0940	9.5	20.90	20	55	130	81	--							
13...	1135	--	20.82	20	--	--	--	1.4							
13...	1235	--	20.88	A20	--	--	--	--							
13...	1430	10.0	20.82	17	30	62	73	--							
13...	1615	--	20.73	A16	--	--	--	--							
13...	2010	--	20.78	A12	--	--	--	--							
13...	2020	10.0	20.79	14	25	66	75	--							
14...	0035	--	20.76	A13	--	--	--	--							
14...	0045	8.0	20.76	13	20	47	81	--							
14...	0800	8.5	20.70	A13	--	--	--	--							
14...	0815	10.0	20.70	11	20	42	60	--							
25...	1445	10.0	20.07	1.1	20	81	61	--							
27...	1230	10.0	19.98	.43	30	30	91	--							
MAR.															
12...	1420	--	20.04	A3.1	--	--	--	--							
12...	1430	9.0	20.04	3.1	9	13	64	--							
18...	1200	--	25.09	150	6500	31100	69	--							
20...	1520	9.0	20.50	17	600	2740	57	--							
20...	1545	--	20.50	A17	--	--	--	--							
25...	1245	--	--	A3.1	--	--	--	--							
25...	1305	--	21.00	31	190	641	66	--							
25...	1310	--	--	31	--	--	--	520							
APR.															
11...	1450	--	20.47	A3.4	--	--	--	--							
11...	1515	--	20.47	3.4	30	55	37	--							
MAY															
07...	1045	--	20.38	A1.8	--	--	--	--							
07...	1100	9.0	20.38	1.8	10	18	--	--							
31...	1515	15.0	20.41	.70	10	9	--	--							
31...	1540	--	20.41	A.70	--	--	--	--							
JUNE															
06...	1325	13.5	20.38	.57	9	7	--	--							
06...	1510	--	20.38	A.57	--	--	--	--							
11482260 MILLER CREEK AT MOUTH NEAR ORICK															
APR., 1974															
11...	1430	14.0	7.36	6.0	--	23	84	--							
11...	1515	--	7.36	A6.0	--	--	--	--							

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TABLE 6.--Water temperature, stage, instantaneous discharge, turbidity,
suspended-sediment concentration and sieve diameter percentage finer
than 0.062 mm, and bedload discharge--Continued

I- N- T- DAD S- RGE AY)	DATE	TIME	TEMPER- ATURE (DEG C)	STAGE (FT ABOVE LATUM)	INSTAN- TANEOUS DIS- CHARGE (FT ³ /S)	TUR- BID- ITY (NTU)	SUS- PENDED SEDIMENT (MG/L)	SUS. SED. MENT	SED. IMENT DIAM. THAN .062 MM	BEDLOAD DIS- CHARGE (T/DAY)
								SUS. SED. MENT		
11482260 MILLER CREEK AT MOUTH NEAR ORICK--CONTINUED										
JULY, 1974										
01...	1040	--	--	A.16	--	--	--	--	--	--
18...	1215	13.5	--	A.10	--	--	--	--	--	--
18...	1300	13.5	--	A.10	--	--	--	--	--	--
18...	1400	13.0	6.90	A.10	--	--	--	--	--	--
18...	1500	13.0	--	A.10	--	--	--	--	--	--
18...	1600	14.0	--	A.10	--	--	--	--	--	--
18...	1700	13.5	--	A.10	--	--	--	--	--	--
18...	1800	13.0	6.89	A.10	--	--	--	--	--	--
18...	1900	13.5	--	A.09	--	--	--	--	--	--
18...	2000	13.5	--	A.09	--	--	--	--	--	--
18...	2100	13.5	--	A.09	--	--	--	--	--	--
18...	2200	13.0	6.86	A.09	--	--	--	--	--	--
18...	2300	13.0	--	A.09	--	--	--	--	--	--
18...	2400	13.0	--	A.09	--	--	--	--	--	--
19...	0100	13.0	6.90	A.09	--	--	--	--	--	--
19...	0200	13.0	6.91	A.10	--	--	--	--	--	--
19...	0300	13.0	--	A.10	--	--	--	--	--	--
19...	0400	13.0	6.93	A.11	--	--	--	--	--	--
19...	0500	13.0	6.93	A.11	--	--	--	--	--	--
19...	0600	13.5	6.95	A.12	--	--	--	--	--	--
19...	0700	13.0	6.98	A.12	--	--	--	--	--	--
19...	0800	13.0	6.95	A.12	--	--	--	--	--	--
19...	0900	13.0	6.95	A.12	--	--	--	--	--	--
19...	1000	13.0	6.96	A.12	--	--	--	--	--	--
19...	1100	13.0	6.95	A.12	--	--	--	--	--	--
19...	1200	13.5	--	A.12	?	?	?	RP	--	--
24...	1040	--	--	A.16	--	--	--	--	--	--
24...	1045	13.0	--	.16	1	3	87	--	--	--
AUG.										
09...	1340	14.5	--	--	1	5	--	--	--	--
SEP.										
10...	1300	13.5	--	A.04	--	--	--	--	--	--
10...	1400	13.5	6.81	A.04	--	--	--	--	--	--
10...	1500	13.5	--	A.04	--	--	--	--	--	--
10...	1600	13.5	6.73	A.04	--	--	--	--	--	--
10...	1700	13.5	--	A.04	--	--	--	--	--	--
10...	1800	13.5	6.71	A.04	--	--	--	--	--	--
10...	1900	13.5	6.76	A.04	--	--	--	--	--	--
10...	2000	13.5	--	A.04	--	--	--	--	--	--
10...	2100	13.5	--	A.04	--	--	--	--	--	--
10...	2200	13.5	--	A.04	--	--	--	--	--	--
10...	2300	13.5	--	A.04	--	--	--	--	--	--
10...	2400	13.0	--	A.04	--	--	--	--	--	--
11...	0100	13.0	6.74	A.04	--	--	--	--	--	--
11...	0200	13.0	6.76	A.04	--	--	--	--	--	--
11...	0300	13.0	6.75	A.04	--	--	--	--	--	--
11...	0400	13.0	6.75	A.04	--	--	--	--	--	--
11...	0500	13.0	--	A.04	--	--	--	--	--	--
11...	0615	12.5	--	A.04	--	--	--	--	--	--
11...	0700	12.5	--	A.04	--	--	--	--	--	--
11...	0800	12.5	--	A.04	--	--	--	--	--	--
11...	0900	12.5	--	A.04	--	--	--	--	--	--
11...	1000	12.5	--	A.04	--	--	--	--	--	--
11...	1100	12.5	6.78	A.04	--	--	--	--	--	--
11...	1200	13.0	--	A.03	--	--	--	--	--	--
11...	1300	13.0	6.78	A.03	1	2	--	--	--	--
11...	1400	12.0	6.76	A.03	2	5	--	--	--	--
11...	1205	--	6.76	A.05	--	--	--	--	--	--
OCT.										
20...	1500	10.0	7.10	1.5	20	19	RP	--	--	--

TABLE 6.--Water temperature, stage, instantaneous discharge, turbidity, suspended-sediment concentration and sieve diameter percentage finer than 0.062 mm, and bedload discharge--Continued

DATE	TIME	TEMPER- ATURE (DEG C)	STAGE (FT ABOVE DAMUM)	INSTANTANEOUS DIS- CHARGE (FT ³ /S)	TUR- BID- ITY (NTU)	SUS- PENDED SEDIMENT (MG/L)	SUS. STEVE DIAM. % FINER THAN .062 MM	SFD. BEDLOAD DTS- CHARGE (T/DAY)
11482260 MILLER CREEK AT MOUTH NEAR ORICK--CONTINUED								
NOV., 1974								
07...	0210	--	6.48	A.04	--	--	--	--
07...	0245	--	6.48	.10	1	2	--	--
07...	0915	--	7.14	A1.9	--	--	--	--
07...	0930	10.0	--	2.0	20	57	77	--
07...	1120	10.0	7.14	2.0	80	73	96	--
07...	1425	--	7.09	A1.4	--	--	--	--
07...	1625	10.0	7.07	1.2	55	39	90	--
20...	2220	--	6.98	A.44	--	--	--	--
20...	2250	9.5	6.98	.42	2	3	--	--
21...	0410	--	6.49	A.44	--	--	--	--
21...	0900	--	7.00	A.57	--	--	--	--
21...	1130	10.0	7.00	.70	2	3	--	--
21...	1350	--	7.04	A.74	--	--	--	--
21...	1420	9.5	7.04	.90	6	14	80	--
21...	1515	--	7.21	A2.4	--	--	--	--
21...	1530	9.5	7.26	6.3	75	304	86	--
21...	1650	--	7.31	A6.1	--	--	--	--
21...	1610	9.0	7.31	5.9	190	453	90	--
21...	1715	9.0	7.28	5.0	750	813	98	--
21...	1810	9.0	7.25	4.4	1400	1460	100	--
21...	2125	--	7.19	A3.1	--	--	--	--
21...	2135	9.0	7.19	3.1	330	244	99	--
22...	0350	--	7.14	A2.1	--	--	--	--
22...	0410	8.5	7.14	2.3	75	55	94	--
22...	0620	8.5	7.13	2.0	55	27	89	--
22...	0910	8.5	7.11	1.8	45	30	94	--
22...	0950	--	7.11	A1.8	--	--	--	--
DFC.								
14...	C1200	--	9.56	.33	420	1080	R3	--
JAN., 1975								
20...	1340	--	6.98	A2.8	--	--	--	--
20...	1400	8.0	6.98	2.8	10	14	62	--
FEB.								
05...	1750	--	7.27	A17	--	--	--	--
05...	1810	8.0	7.27	17	60	74	84	--
04...	2050	10.0	7.22	15	180	236	91	--
04...	2245	10.0	7.20	19	360	792	90	--
04...	2350	--	7.29	A18	--	--	--	--
09...	0005	10.0	7.29	18	260	414	90	--
09...	0330	9.5	7.27	17	70	110	86	--
09...	0400	9.5	7.40	14	45	87	61	--
09...	0835	--	--	A14	--	--	--	--
11...	1120	--	7.28	18	30	52	82	--
12...	1600	--	9.72	A29	--	--	--	--
12...	1630	10.5	9.78	29	65	145	76	--
12...	1745	--	9.71	A28	--	--	--	--
12...	1700	10.0	9.64	28	60	122	78	--
12...	1820	10.0	9.65	28	--	--	--	6.3
12...	2130	--	9.52	A36	--	--	--	--
12...	2140	--	9.50	36	440	1150	85	--
12...	2200	10.0	9.60	36	--	--	--	14
13...	0145	--	9.56	A40	--	--	--	--
13...	0900	9.5	9.52	44	650	1530	89	--
13...	0910	9.5	9.53	43	--	--	--	14
13...	0930	--	9.52	A44	--	--	--	--
13...	1000	9.5	9.52	44	160	495	72	--
13...	1245	--	9.23	A37	--	--	--	--

Water temperature, stage, instantaneous discharge, turbidity,
bedload-sediment concentration and sieve diameter percentage finer
0.062 mm, and bedload discharge--Continued

TIME	TEMPERATURE (DEG C)	STAGE (FT.)	INSTANTANEOUS DISCHARGE (FT ³ /S)	THROUGH-SIEVE DISCHARGE (FT/H)	SUS.	SED.	SEDIMENT LOAD
					SEDIMENT CONCENTRATION (MG/L)	DIA. % FINER THAN 0.062 MM	DISCHARGE (T/DAY)

11482260 MILLER CREEK AT MOUTH NEAR ORICK--CONTINUED

MAY	1974	1305	9.4	9.15	37	85	291	67	--
		1320	9.5	9.15	36	--	--	--	15
		2335	--	8.24	A31	--	--	--	--
		0010	--	8.24	31	56	146	70	--
		0015	8.5	8.24	31	--	--	--	7.0
		0925	--	7.59	A27	--	--	--	--
		0940	7.5	7.58	27	40	103	74	--
		0945	7.5	7.58	27	--	--	--	4.0
		C1200	--	9.56	33	1700	5250	77	--
		C1500	--	11.16	50	780	2340	92	--
		1200	10.0	--	--	65	195	65	--
		1225	--	7.10	A6.3	--	--	--	--
JUN.		1145	--	9.36	A25	--	--	--	--
		1215	--	9.36	25	100	273	74	--
		C2400	--	11.16	50	1700	6370	73	--
JUL.		1115	--	--	A3.4	--	--	--	--
		1130	7.5	8.99	3.4	9	26	61	--
		1230	11.0	9.21	2.3	9	13	81	--
		1245	--	--	A2.3	--	--	--	--
		1130	12.0	7.05	.98	5	6	--	--
		1205	--	7.05	A.98	--	--	--	--
JNF.		1240	--	7.81	A.90	--	--	--	--
		1300	12.0	7.81	.90	5	9	--	--

11482270 BOND CREEK NEAR ORICK

MAY	1974	1625	--	2.55	A3.3	--	--	--	--
		1640	11.5	2.55	3.3	8	9	48	--
JUN.		09...	1450	--	--	A.45	--	--	--
		09...	1530	14.5	--	--	2	6	--
DEC.		21...	1100	--	2.71	6.3	140	164	96
JAN.	1975	10...	1215	--	2.92	A18	--	--	--
		10...	1225	9.0	2.92	18	9	92	46
FEB.		11...	1200	9.0	2.84	12	25	58	78
		19...	C1200	--	3.21	32	1100	2310	92
		24...	1315	9.5	2.88	14	30	57	80
		26...	1235	9.0	2.83	11	20	50	74
		26...	1255	--	2.83	A11	--	--	--
MAR.		18...	C1200	--	3.21	32	670	1950	71
		18...	C1300	--	3.96	90	1600	2150	98
		25...	1240	--	3.34	A6.0	--	--	--
		25...	1245	9.0	3.34	40	85	461	56
APR.		09...	1240	9.5	2.75	7.7	8	21	29
		09...	1215	--	2.75	A7.7	--	--	--
MAY		14...	1320	--	2.57	A4.3	--	--	--
		14...	1330	11.0	2.61	4.3	9	18	--
JUN.		12...	1445	12.0	--	--	2	2	--
		12...	1125	--	2.52	A.78	--	--	--
SEP.		19...	1215	--	2.52	A.19	--	--	--

TABLE 6.--Water temperature, stage, instantaneous discharge, turbidity, suspended-sediment concentration and sieve diameter percentage finer than 0.062 mm, and bedload discharge--Continued

DATE	TIME (HRS CT)	STAGE ABOVE DATUM	INSTANTANEOUS DISCHARGE (CFT ³ /S)	TURBIDITY (JHM)	SUSPENDED SEDIMENT (MG/L)	SUS. SED. SIEVE DIAM. % FINER THAN 0.062 MM	SEDIMENT BEDLOAD DISCHARGE (T/DAY)
						T	
11482280 CLOQUET CREEK NEAR ORICK							
MAY 1, 1974							
09...	0810	9.0	1.27	.65	?	?	--
09...	0840	--	1.27	A.65	--	--	--
AUG.							
09...	1600	16.0	--	--	?	11	58
JAN. 1, 1975							
10...	1250	9.5	3.15	27	15	43	71
10...	1300	--	3.15	A27	--	--	--
FEB.							
11...	1230	9.5	3.04	22	10	23	84
18...	1445	8.5	2.75	7.0	--	79	94
19...	1145	--	3.66	A64	--	--	--
19...	1200	9.0	3.68	66	270	690	84
19...	1205	9.0	3.68	66	--	739	77
26...	1100	--	2.70	A4.5	--	--	--
26...	1340	8.5	2.70	4.5	5	9	--
MAR.							
27...	1305	8.0	--	--	25	64	68
MAY							
14...	1355	11.0	--	--	3	7	--
14...	1400	--	--	A1.8	--	--	--
11482290 OSCAR LARSON CREEK NEAR ORICK							
MAY 1, 1974							
09...	1040	--	2.37	A.43	--	--	--
09...	1055	9.5	2.37	.43	5	12	92
JAN. 1, 1975							
05...	01200	--	3.93	80	320	835	83
10...	1405	--	3.23	A15	--	--	--
10...	1425	9.5	3.26	17	30	49	75
FEB.							
11...	1310	9.0	3.31	12	15	17	82
19...	01000	--	3.93	80	370	1080	74
19...	1250	--	3.56	A27	--	--	--
19...	1300	9.0	3.56	27	110	307	72
26...	1420	--	2.85	2.0	6	7	--
26...	1445	--	2.85	A2.0	--	--	--
MAR.							
27...	1400	8.0	2.56	2.0	35	70	81
MAY							
14...	1430	10.0	2.38	1.0	4	8	--
14...	1435	--	2.38	A1.0	--	--	--
11482295 GANS SOUTH CREEK NEAR ORICK							
JAN. 1, 1975							
07...	01400	--	3.05	20	21	56	60
10...	1455	--	2.94	A13	--	--	--
10...	1500	9.5	2.94	13	4	3	--
FEB.							
11...	1345	9.0	2.83	9.0	3	5	--
11...	1400	9.0	--	--	--	10	--
14...	1345	9.0	3.10	A23	20	39	67
26...	1515	9.0	2.50	A2.0	7	22	76
MAR.							
27...	1430	8.0	2.26	1.1	6	8	82
MAY							
14...	1125	10.0	2.06	A.69	2	7	--

water temperature, stage, instantaneous discharge, turbidity, suspended-sediment concentration and sieve diameter percentage finer than 0.062 mm, and bedload discharge--Continued

TIME	TEMPERATURE (DEG C)	STAGE ABOVE DATUM	INSTANTANEOUS DISCHARGE (FT ³ /S)	TURBIDITY (JNTUH)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED DIAM. % FINER THAN .062 MM	SUSPENDED SEDIMENT BEDLOAD (T/DAY)
					SUS. SED.	SEDIMENT	SEDIMENT
11482300 ELAM CREEK NEAR ORICK							
MAY 1974							
1240	11.0	3.02	3.4	3	2	88	--
1255	--	3.02	A3.4	--	--	--	--
1415	--	--	A1.3	--	--	--	--
1430	16.0	--	--	3	8	71	--
1320	--	2.72	A.88	--	--	--	--
C1200	--	--	--	150	503	60	--
1205	9.5	3.30	13	70	70	96	--
JUN 1975							
1535	9.5	3.74	A34	--	--	--	--
1550	9.5	3.74	34	15	27	50	--
1140	5.0	2.90	2.6	5	4	81	--
1400	9.0	--	--	5	10	71	--
C1200	--	4.78	115	370	654	92	--
1450	--	4.29	A79	--	--	--	--
1500	9.0	4.33	80	85	157	80	--
1505	9.0	4.33	80	--	191	74	--
1410	--	3.22	A12	--	--	--	--
1425	10.0	3.22	12	4	9	76	--
1455	10.0	--	--	10	22	74	--
1350	8.0	--	--	4	5	--	--
1415	--	1.39	A9.7	--	--	--	--
JULY 1975							
1215	11.5	--	--	3	7	--	--
1230	--	--	A5.4	--	--	--	--
11482305 GANS WEST CREEK NEAR ORICK							
MAY 1975							
1415	9.0	2.91	A4.6	4	12	49	--
1415	--	2.77	2.1	?	4	--	--
1600	8.5	3.12	A10	15	47	58	--
1605	8.5	2.68	--	1	2	--	--
1630	--	2.68	A.88	--	--	--	--
JUN 1975							
1525	8.0	2.79	2.3	4	11	68	--
JULY 1975							
1300	10.0	2.52	.44	?	3	--	--
1315	--	2.52	A.44	--	--	--	--
11482310 MCARTHUR CREEK NEAR ORICK							
MAY 1974							
1409	1435	11.0	--	--	3	6	88
1409	1500	--	2.80	A6.7	--	--	--
1406							
1410	1200	--	--	A1.4	--	--	--
1410	1210	13.5	--	--	4	3	--
JUN 1974							
1555	--	--	A1.3	--	--	--	--
NOV 1974							
1145	1145	9.0	2.65	3.1	6	5	81
1145	1315	--	2.65	A3.1	--	--	--
DEC 1974							
1404	C1200	--	3.41	29	41	92	66
1404	1250	9.0	3.13	16	10	11	85
JAN 1975							
1045	1645	9.0	3.64	35	15	11	75

TABLE 6.--Water temperature, stage, instantaneous discharge, turbidity, suspended-sediment concentration and sieve diameter percentage finer than 0.062 mm, and bedload discharge--Continued

DATE	TIME	WATER STAGE (FT)	INSTANTANEOUS TURBIDITY (NTU)	BEDLOAD DISCHARGE (CU FT/S)	PERIODIC SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT DIAMETER % FINER THAN 0.062 MM	SUS. SED. MENT
							TURBID- ITY (NTU)
11482310 MCARTHUR CREEK NEAR ORICK--CONTINUED							
FEB., 1975							
11...	1425	9.0	3,645	25	6	.8	67
19...	1625	9.0	5,246	200	35	83	69
27...	1500	--	3.21	A22	--	--	--
27...	1515	10.0	3.21	22	7	5	--
MAR.							
27...	1545	9.0	3,482	47	7	14	76
APR.							
04...	1525	9.0	3,38	16	4	9	--
09...	1535	--	3,38	A16	--	--	--
MAY							
16...	1310	10.5	3,26	9.1	5	6	--
16...	1345	--	3,26	A9.1	--	--	--
11482320 LOW-SLOPE SCHIST CREEK NEAR ORICK							
MAY, 1974							
10...	0940	9.0	2,52	A33	1	1	33
10...	1040	--	2,52	A33	--	--	--
SEP.							
07...	1710	--	2,52	A.05	--	--	--
NOV.							
18...	1350	--	2,70	.03	1	1	--
18...	1400	--	2,70	A.03	--	--	--
JAN., 1975							
10...	1700	A.5	3,28	1.3	2	7	58
10...	1705	--	3.28	A1.3	--	--	--
FEB.							
13...	1450	9.0	3,21	.80	3	5	--
27...	1540	9.5	3,20	.80	2	5	60
27...	1550	--	3,20	A.76	--	--	--
MAR.							
18...	C1200	--	3,51	25	27	150	54
27...	1600	8.0	2,99	.30	2	4	--
APR.							
09...	1615	--	2,78	A.62	2	4	--
MAY							
16...	1415	9.5	2,69	.32	1	3	--
16...	1425	--	2,69	A.32	--	--	--
11482330 HAYES CREEK NEAR ORICK							
JULY, 1974							
01...	1500	13.0	4.81	A.03	--	--	--
19...	1150	13.0	4.50	--	1	11	--
27...	1400	--	4.48	A.03	--	--	--
27...	1405	--	4.48	A.03	1	1	--
AUG.							
19...	1110	13.0	4.46	.20	3	7	--
OCT.							
28...	1230	--	4.91	.10	3	8	--

Fig. 6.--Water temperature, stage, instantaneous discharge, turbidity, suspended-sediment concentration and sieve diameter percentage finer than 0.062 mm, and bedload discharge--Continued

DATE	TIME	TEMPER- TURE (DEG C)	STAGE (FT ABOVE DATUM)	INSTANTANEOUS DIS- CHARGE (FT ³ /S)	TUR- BID- ITY (JNT)	SUS. SED. PENED SEN- SIT. MINT THAN 0.062 MM	SUS. SED. PENED SEN- SIT. MINT THAN 0.062 MM	SUS. SED. PENED SEN- SIT. MINT THAN 0.062 MM
						STAGE (FT ABOVE DATUM)	TUR- BID- ITY (JNT)	SUS. SED. PENED SEN- SIT. MINT THAN 0.062 MM
11482330 HAYES CREEK NEAR ORICK--CONTINUED								
NOV., 1974								
07...	0400	10.0	4.04	A.05	--	--	--	--
07...	0900	10.0	4.05	A.07	5	8	76	--
07...	0930	--	4.06	A.10	--	--	--	--
07...	1000	10.0	4.06	A.19	5	8	75	--
07...	1100	10.0	4.06	A.27	3	4	--	--
07...	1200	10.0	4.06	A.21	2	2	--	--
07...	1300	10.0	4.06	A.20	?	?	--	--
07...	1400	10.0	4.08	A.18	--	--	--	--
07...	1500	10.0	4.04	A.16	--	--	--	--
07...	1615	10.0	4.07	A.13	2	1	--	--
07...	1910	10.0	4.06	A.09	--	--	--	--
07...	2200	9.0	4.03	A.03	--	--	--	--
08...	0730	9.0	4.00	0.01	1	2	--	--
21...	1330	10.5	4.79	0.01	2	6	--	--
21...	1505	--	5.08	A.46	--	--	--	--
21...	1640	9.5	5.04	0.97	35	93	90	--
21...	1700	9.5	5.09	0.94	25	60	79	--
21...	1800	9.5	5.04	0.75	8	13	84	--
21...	1915	--	5.00	A.53	--	--	--	--
21...	2015	9.0	5.00	.51	5	13	50	--
22...	0145	--	4.04	A.31	--	--	--	--
22...	0420	8.5	4.95	0.25	4	7	--	--
DEC.								
21...	1330	9.0	5.15	19	4	4	--	--
JAN., 1975								
17...	1515	9.0	5.11	A2.0	--	--	--	--
17...	1530	9.0	5.11	2.0	5	15	57	--
FFH.								
05...	1445	--	5.47	A6.7	--	--	--	--
05...	1505	8.0	5.47	6.1	5	12	50	--
05...	1920	--	5.45	A5.7	--	--	--	--
06...	0240	--	5.40	A5.5	--	--	--	--
06...	0955	--	5.37	A4.0	--	--	--	--
06...	2115	9.0	5.31	4.4	4	5	--	--
06...	2150	--	5.31	A4.4	--	--	--	--
07...	0230	--	5.29	A4.2	--	--	--	--
07...	0445	--	5.27	A3.8	--	--	--	--
08...	1120	--	5.20	A3.0	--	--	--	--
08...	2300	--	5.30	A4.1	--	--	--	--
08...	2325	9.5	5.30	4.0	5	10	71	--
09...	0335	--	5.25	A3.6	--	--	--	--
09...	0725	--	5.24	A3.8	--	--	--	--
09...	1015	--	5.24	A3.8	--	--	--	--
12...	1300	--	5.48	A6.2	--	--	--	--
12...	1330	9.5	5.48	6.2	5	8	64	--
12...	1725	--	5.46	A5.8	--	--	--	--
12...	2125	--	5.47	A6.4	--	--	--	--
12...	2310	10.0	5.59	6.9	6	25	67	--
13...	0215	--	5.52	A6.4	--	--	--	--
13...	0515	--	5.53	A6.4	--	--	--	--
13...	0620	9.5	5.53	6.4	7	13	76	--
13...	0925	--	5.55	A6.7	--	--	--	--
13...	1230	9.0	5.58	7.2	10	27	54	--
13...	1255	--	5.58	A7.3	--	--	--	--
13...	1620	--	5.58	A7.3	--	--	--	--
13...	2025	--	5.58	A7.6	--	--	--	--
14...	0025	--	5.54	A7.5	--	--	--	--
14...	0100	8.5	5.58	7.5	6	14	72	--
14...	0810	--	5.56	7.1	--	--	--	--
14...	1000	8.0	5.56	7.0	--	--	--	--
14...	1305	--	5.46	A2.9	--	--	--	--
14...	1410	9.5	5.46	29	25	231	66	27
14...	1440	--	5.46	29	--	--	--	--
14...	1630	8.5	5.23	2.1	7	21	43	--

TABLE 6.--Water temperature, stage, instantaneous discharge, turbidity, suspended-sediment concentration and sieve diameter percentage finer than 0.062 mm, and bedload discharge--Continued

DATE	TIME	TEMPERATURE (DEG C)	STAGE (FT)	INSTANTANEOUS DISCHARGE (CU FT/S)	TURBIDITY (NTU)	SUSPENDED SEDIMENT (MG/L)	SUS. SEDIMENT (MM)	SEDI- MENT BEDLOAD (T/DAY)
							% FINEER THAN .062 MM	DIS- CHARGE (T/DAY)
11482330 HAYES CREEK NEAR ORICK--CONTINUED								
MAR., 1975								
11...	1045	--	5.25	A6.5	--	--	--	--
11...	1100	6.0	5.25	6.5	5	5	--	--
24...	1515	--	6.40	A6.9	--	--	--	--
24...	1530	4.0	6.40	8.5	60	204	69	--
25...	1005	--	6.71	A22	--	--	--	--
25...	1020	--	6.70	21	75	272	64	--
25...	1025	--	6.70	21	--	--	--	70
APR.								
04...	1345	7.0	6.21	2.3	20	24	92	--
04...	1415	--	6.21	A2.3	--	--	--	--
MAY								
02...	1350	9.5	6.11	1.4	?	11	--	--
11482450 LOST MAN CREEK NEAR ORICK								
JULY, 1974								
03...	1130	14.0	6.65	A.90	--	--	--	--
18...	1145	--	--	A.55	--	--	--	--
18...	1455	--	--	A.60	--	--	--	--
18...	1655	--	--	A.64	--	--	--	--
18...	1835	--	--	A.63	--	--	--	--
19...	0620	--	--	A.77	--	--	--	--
19...	1145	--	--	A.81	--	--	--	--
19...	1230	--	--	.81	1	--	--	--
22...	1300	--	6.64	A.56	--	--	--	--
22...	1320	--	6.64	.56	1	28	16	--
SEP., 1974								
11...	1245	--	--	A.21	--	--	--	--
11...	1330	--	--	--	1	1	--	--
15...	1030	14.0	6.51	A.22	--	--	--	--
15...	1100	14.0	6.51	.22	1	6	--	--
19...	1145	--	--	A.81	--	--	--	--
OCT.								
28...	1120	--	6.77	.40	10	27	74	--
28...	1200	--	--	--	25	59	69	--
NOV.								
06...	2130	11.5	6.58	.34	1	1	--	--
07...	0050	--	6.58	A.34	--	--	--	--
07...	0330	--	6.73	.38	2	3	--	--
07...	0610	--	--	A.44	--	--	--	--
07...	0645	11.0	6.80	.42	20	22	96	--
07...	0900	--	--	.44	6	4	--	--
07...	0940	--	6.62	A.45	--	--	--	--
07...	1210	--	6.62	A.47	--	--	--	--
07...	1325	--	6.71	A.74	--	--	--	--
07...	1340	11.0	7.00	.74	3	3	--	--
07...	1530	--	6.72	A.90	--	--	--	--
07...	1815	--	6.79	A1.9	--	--	--	--
07...	1840	11.0	6.90	2.0	4	9	--	--
07...	2140	--	6.82	A2.9	--	--	--	--
07...	2200	11.0	6.82	2.4	3	8	--	--
08...	0000	10.5	6.78	2.1	2	3	--	--
08...	0810	--	6.78	A2.1	--	--	--	--
20...	1930	10.0	6.71	A.63	--	--	--	--
21...	0000	10.0	6.70	.62	1	2	--	--
21...	1200	10.0	6.71	.60	1	2	--	--
21...	1340	--	6.72	A.5	6	10	77	--
21...	1500	9.5	6.72	.70	25	32	68	--
21...	1630	10.0	6.73	.69	15	14	56	--
21...	1700	10.0	6.74	.68	6	18	63	--
21...	1730	--	6.81	A2.9	--	--	--	--
21...	1750	10.0	6.82	.62	9	26	87	--

6. -Water temperature, stage, instantaneous discharge, turbidity, suspended-sediment concentration and sieve diameter percentage finer than 0.062 mm, and bedload discharge--Continued

DATE	TIME	TEMPERATURE (DEG C)	STAGE ABOVE DATUM	INSTANTANEOUS DISCHARGE (CFS)	TURBIDITY (NTU)	SUSPENDED SEDIMENT (MG/L)	SIEVE DIAM. THAN 0.062 MM	SEDIMENT BEDLOAD (T/DAY)
11482450 LOST MAN CREEK NEAR ORICK--CONTINUED								
NOV., 1974								
16...	1800	10.5	6.86	4.6	25	75	86	--
16...	1900	10.0	6.90	18	30	89	74	--
16...	2000	10.0	7.01	21	15	41	77	--
16...	2100	10.0	6.99	17	10	22	72	--
16...	2200	9.5	6.48	16	8	15	78	--
16...	2300	9.5	6.97	15	7	14	74	--
16...	2400	9.5	6.95	13	6	10	--	--
17...	0100	9.5	6.94	11	6	10	--	--
17...	0200	9.5	6.93	10	5	7	--	--
17...	0300	9.5	6.91	8.8	4	10	--	--
17...	0400	9.5	6.91	A7.8	--	--	--	--
17...	0600	9.5	6.89	6.6	4	8	--	--
17...	0940	--	6.87	A5.2	--	--	--	--
17...	1000	9.5	6.88	5.0	3	10	--	--
DEC.								
18...	1300	9.0	7.10	A31	9	15	76	--
JAN., 1975								
19...	1600	8.0	6.94	A13	--	--	--	--
19...	1605	8.0	--	--	5	5	PR	--
20...								
20...	1730	--	7.39	A59	--	--	--	--
20...	1745	6.5	7.39	54	10	31	76	--
20...	0020	--	7.38	A56	--	--	--	--
20...	0040	--	7.38	54	8	22	71	--
20...	1010	--	7.30	A50	--	--	--	--
20...	1030	7.5	7.30	50	10	28	77	--
20...	1625	--	7.18	A31	--	--	--	--
20...	1630	8.0	7.18	31	6	12	71	--
20...	2130	--	7.22	A38	--	--	--	--
20...	2145	8.0	7.22	40	20	35	84	--
20...	0140	--	7.40	A52	--	--	--	--
20...	0230	9.0	7.39	62	20	37	82	--
20...	1245	8.0	7.50	76	10	30	74	--
20...	1445	--	7.44	A76	--	--	--	--
20...	1455	9.0	7.44	76	--	--	--	7.4
20...	1810	--	7.44	A77	--	--	--	--
20...	1820	8.0	7.44	77	90	21	76	4.6
20...	2215	--	7.45	A83	--	--	--	--
20...	2230	9.0	7.45	88	35	69	85	--
20...	2235	9.0	7.46	89	--	--	--	7.2
20...	2300	9.0	7.50	92	45	119	79	--
20...	0015	--	7.52	A103	--	--	--	--
20...	0025	8.5	7.29	99	25	88	73	--
20...	0030	8.5	7.52	98	--	--	--	32
20...	0300	9.0	7.51	92	20	69	69	--
20...	0420	--	7.52	A93	--	--	--	--
20...	0430	9.0	7.52	95	20	48	75	--
20...	0435	9.0	7.51	96	--	--	--	12
20...	0730	--	7.54	A105	--	--	--	--
20...	0735	8.5	7.54	105	20	68	71	--
20...	0740	8.5	7.54	105	--	--	--	42
20...	1115	--	7.61	A116	--	--	--	--
20...	1130	8.5	7.61	121	30	110	67	--
20...	1140	8.5	7.60	121	--	--	--	8.5
20...	1520	--	7.56	A115	--	--	--	--
20...	1535	7.5	7.56	114	20	62	21	19
20...	0030	--	7.40	A96	--	--	--	--
20...	0045	--	7.48	94	--	--	--	12
20...	0745	--	7.41	A80	--	--	--	--
20...	0750	7.0	7.40	81	15	25	68	--
20...	0800	7.0	7.40	80	--	--	--	23
20...	1300	8.0	6.94	13	6	15	64	--

TABLE 6.--Water temperature, stage, instantaneous discharge, turbidity, suspended-sediment concentration and sieve diameter percentage finer than 0.062 mm, and bedload discharge--Continued

TIME DATE	TEMPER- ATURE (DEG. C)	STAGE ABOVE DATUM	INSTAN- TANEOUS DIS- CHARGE (FT ³ /S)	TURB- IDITY (JTU)	SUS- PENDED MENT SEDFV	EUS. SEDIMENT BEDLOAD	
						SUS- PENDED MENT % FINE THAN 0.062 MM	SEDIMENT BEDLOAD DIS- CHARGE (T/DAY)
11482450 LOST MAN CREEK NEAR ORICK--CONTINUED							
MAR., 1975							
01...	1800	9.0	6.94	11	7	14	78
11...	1315	--	7.01	A27	--	--	--
11...	1330	9.5	7.01	18	9	9	76
18...	1130	8.0	9.60	1000	800	3780	59
20...	1400	--	7.20	A89	--	--	--
20...	1425	7.5	7.20	90	55	139	86
20...	1430	--	7.20	90	--	--	--
21...	1400	--	7.50	185	240	963	66
21...	1415	--	7.47	A181	--	--	--
21...	1450	--	7.50	185	--	--	144
APR.							
03...	1420	--	6.65	A19	--	--	--
03...	1445	6.5	6.65	19	45	89	93
MAY							
05...	1045	8.0	6.65	19	3	17	61
05...	1100	--	6.65	A19	--	--	--
JUN.							
02...	1130	12.0	6.10	3.1	?	4	--
02...	1215	--	6.10	A3.1	--	--	--
08...	1130	--	6.15	A2.5	--	--	--
08...	1200	12.0	6.15	2.5	1	3	--
11482455 LOST MAN CREEK TRIBUTARY NEAR ORICK							
DEC., 1974							
17...	1450	--	2.89	A3.0	--	--	--
17...	1500	9.5	2.95	3.4	3	4	--
JAN., 1975							
13...	1240	--	2.83	A1.7	--	--	--
13...	1300	8.5	2.83	1.7	3	4	--
FEB.							
09...	02400	--	--	2.8	12	53	65
11...	1525	9.0	3.00	3.9	3	5	--
25...	1300	8.5	2.72	1.6	3	3	--
MAR.							
11...	1425	--	2.79	A1.9	--	--	--
11...	1445	8.0	2.79	1.9	2	3	--
28...	1330	7.5	2.68	1.4	10	17	92
APR.							
08...	1325	--	2.58	A1.3	--	--	--
08...	1340	7.5	2.58	1.3	3	6	--
MAY							
05...	1220	8.0	2.58	1.9	1	3	--
05...	1230	--	2.58	A.91	--	--	--
11482460 LARRY DAMM CREEK NEAR ORICK							
JULY, 1974							
27...	1125	--	--	A.54	--	--	--
27...	1140	--	2.10	.58	3	3	--
OCT.							
28...	1145	--	2.28	4.7	65	127	91
DEC.							
14...	C1200	--	3.18	46	220	1240	69
14...	1030	9.0	2.37	7.4	7	20	45
14...	1130	--	2.37	A6.9	--	--	--
JAN., 1975							
13...	1115	--	2.47	A7.9	--	--	--
13...	1140	9.0	2.47	11	8	11	69
FEB.							
11...	1540	10.5	3.15	44	6	23	63
14...	C1200	--	3.18	46	130	304	92
25...	1215	8.0	2.37	7.4	3	18	43

TABLE 6.--Water temperature, stage, instantaneous discharge, turbidity, suspended-sediment concentration and sieve diameter percentage finer than 0.062 mm, and bedload discharge--Continued

DATE	TIME	TEMPERATURE (DEG C)	STAGE (FT) ABOVE AHD(M)	INSTANTANEOUS DISCHARGE (FT ³ /S)	TURBIDITY (FTU)	SUSPENDED SEDIMENT (MG/L)	SUS. SED.	SIEVE MENT	BEDLOAD DIS- CHARGE (T/DAY)
11482460 LARRY DAMM CREEK NEAR ORICK--CONTINUED									
MAR., 1975									
05...	1250	--	2.36	A4.6	--	--	--	--	--
06...	1415	10.0	2.36	7.0	6	8	67	--	--
15...	1230	10.5	5.59	265	400	1500	69	--	--
18...	1235	10.5	5.59	265	--	1910	65	--	--
28...	1500	10.0	2.47	11	15	24	91	--	--
APR.									
08...	1135	--	2.38	A8.0	--	--	--	--	--
09...	1200	--	2.38	7.6	3	19	55	--	--
MAY									
05...	1325	10.5	2.29	5.0	2	7	--	--	--
05...	1340	--	2.29	A5.3	--	--	--	--	--
11482468 LITTLE LOST MAN CREEK AT SITE NO. 2 NEAR ORICK									
FEB., 1974									
610...	1930	--	--	--	--	2	--	--	--
610...	1300	7.0	--	--	--	3	--	--	--
610...	1600	7.0	--	--	1	2	--	--	--
610...	1710	8.5	--	--	--	2	--	--	--
622...	1110	7.0	--	--	3	8	78	--	--
MAR.									
628...	1530	--	--	--	3	4	--	--	--
629...	1345	--	--	--	35	140	61	--	--
629...	1935	9.0	--	149	50	179	62	--	--
JUN.									
28...	0930	--	.94	A.71	--	--	--	--	--
JULY									
03...	1230	15.5	--	.63	1	--	--	--	--
04...	1600	--	--	--	1	--	--	--	--
18...	1330	--	.89	A.46	--	--	--	--	--
18...	2030	--	.89	A.44	--	--	--	--	--
19...	0650	--	.90	A.44	--	--	--	--	--
19...	1225	--	.90	.45	1	2	67	--	--
22...	1230	15.0	--	A.41	--	--	--	--	--
22...	1300	15.0	--	.41	1	2	--	--	--
AUG.									
05...	1245	--	.78	A.23	--	--	--	--	--
09...	1600	16.0	.80	A.33	1	4	--	--	--
SEP.									
10...	1550	--	--	A.32	--	--	--	--	--
10...	1815	--	--	A.29	--	--	--	--	--
10...	2045	--	--	A.32	--	--	--	--	--
10...	2300	--	--	A.33	--	--	--	--	--
11...	0050	--	--	A.31	--	--	--	--	--
11...	0345	--	--	A.30	--	--	--	--	--
11...	0705	--	--	A.32	--	--	--	--	--
11...	0950	--	--	A.32	--	--	--	--	--
11...	1200	15.0	.74	.31	1	1	--	--	--
11...	1250	--	--	A.31	--	--	--	--	--
15...	1320	14.5	.74	A.21	--	--	--	--	--
15...	1340	14.5	.74	.20	1	1	--	--	--
OCT.									
02...	1755	--	.70	A.15	--	--	--	--	--
28...	1105	--	1.41	3.4	4	12	--	--	--
NOV.									
06...	2010	9.0	.76	A.16	--	--	--	--	--

TABLE 6.--Water temperature, stage, instantaneous discharge, turbidity, suspended-sediment concentration and sieve diameter percentage finer than 0.062 mm, and bedload discharge--Continued

DATE	TIME	TEMPER- ATURE (DEG C)	STAGE (FT) ABOVE DAM	INSTANTANEOUS DIS- CHARGE (FT ³ /S)	TUR- BID- ITY (JTIII)	SUS- PENDED SEDI- MENT (MG/L)	STEVE BEDLOAD % FINER THAN 0.062 MM	SUS- PENDED SEDI- MENT (T/DAY)
						SUS- PENDED SEDI- MENT (MG/L)	STEVE BEDLOAD % FINER THAN 0.062 MM	SUS- PENDED SEDI- MENT (T/DAY)
11482468 LITTLE LOST MAN CREEK AT SITE NO. 2 NEAR ORICK--CONTINUED								
NOV., 1974								
06...	2020	--	.76	.16	1	1	--	--
07...	0410	9.0	.77	.17	1	2	--	--
07...	0640	9.0	.87	.44	1	2	--	--
07...	0650	9.0	.91	A.47	--	--	--	--
07...	0835	9.5	1.04	.74	2	4	--	--
07...	0900	9.5	1.06	A.86	--	--	--	--
07...	1040	9.5	1.13	1.2	2	4	--	--
07...	1240	9.5	1.18	1.5	2	6	--	--
07...	1330	9.5	1.19	A1.6	--	--	--	--
07...	1405	9.5	1.19	1.6	2	3	--	--
07...	1805	9.5	1.23	1.7	2	2	--	--
07...	2230	--	1.16	1.2	1	4	--	--
08...	0800	--	1.00	A.84	--	--	--	--
08...	0825	8.0	.99	.32	1	1	--	--
20...	1730	--	.88	A.41	--	--	--	--
20...	1800	9.5	.88	.45	1	1	--	--
21...	0430	9.5	.89	.48	1	1	--	--
21...	0600	9.5	.89	.48	1	1	--	--
21...	1045	9.5	.89	.50	1	2	--	--
21...	1050	--	.89	A.46	--	--	--	--
21...	1245	10.5	.91	.55	1	1	--	--
21...	1400	9.5	1.08	.1.1	2	7	--	--
21...	1435	9.5	1.31	1.8	7	18	--	--
21...	1510	--	1.39	A3.1	--	--	--	--
21...	1520	9.5	1.40	3.1	15	29	75	--
21...	1610	9.0	1.49	5.1	10	34	59	--
21...	1720	--	1.60	A8.8	--	--	--	--
21...	1800	9.5	1.62	11	15	49	67	--
21...	2040	8.5	1.66	13	15	32	88	--
21...	2120	--	1.64	A12	--	--	--	--
21...	2230	8.5	1.60	11	7	22	68	--
22...	0100	8.5	1.52	8.5	5	38	43	--
22...	0200	8.5	1.49	A7.3	--	--	--	--
22...	0800	8.0	1.37	3.0	2	2	88	--
22...	0830	8.0	1.36	A2.8	--	--	--	--
DEC.								
18...	1045	--	1.86	A16	--	--	--	--
18...	1105	8.5	1.86	21	6	8	--	--
JAN., 1975								
16...	1110	8.0	1.75	A14	--	--	--	--
16...	1220	8.0	1.75	14	3	5	71	--
FEB.								
05...	1415	7.5	2.16	41	6	16	86	--
05...	1420	7.5	2.16	A40	--	--	--	--
05...	2210	--	2.15	A43	--	--	--	--
06...	0410	--	2.12	A38	--	--	--	--
06...	0415	8.0	2.12	38	5	18	51	--
06...	1405	9.0	2.08	37	5	11	70	--
06...	2240	8.0	2.14	40	6	10	83	--
08...	2025	9.0	1.93	A26	--	--	--	--
08...	2045	9.0	1.94	27	4	10	71	--
08...	2125	4.0	2.03	33	8	19	77	--
09...	0130	9.0	2.09	38	9	20	79	--
09...	0250	9.0	2.08	37	9	22	64	--
09...	0320	--	2.08	A37	--	--	--	--
09...	0400	9.0	2.08	37	8	17	82	--
09...	0415	9.0	2.08	36	7	14	74	--
09...	0725	8.5	2.08	16	6	16	59	--
09...	0930	9.0	2.07	35	6	13	61	--
09...	1225	9.0	2.05	35	5	7	--	--

ity,
iner
m 5.--Water temperature, stage, instantaneous discharge, turbidity,
suspended-sediment concentration and sieve diameter percentage finer
than 0.062 mm, and bedload discharge--Continued

TIME DATE	TEMPER- (DEG C)	STAGE (FT ABOVE NAT/M)	INSTANTANEOUS DIS- CHARGE (CFT ³ /S)	TUR- BID- ITY (Utu)	SUS- PENDED SEDIM- ENT (MG/L)	SUS. STEVE DIAM. % FINER THAN 0.062 MM	SFD. MENT BEDLOAD (T/DAY)
					SUS. STEVE DIAM. % FINER THAN 0.062 MM	SFD. MENT BEDLOAD (T/DAY)	
11482468 LITTLE LOST MAN CREEK AT SITE NO. 2 NEAR ORICK--CONTINUED							
JAN.							
1975							
12... 1140	9.0	2.21	49	5	11	66	--
12... 1300	--	2.22	A50	--	--	--	--
12... 1330	9.0	2.22	49	6	14	--	--
12... 1415	9.0	2.21	49	7	13	72	--
12... 1625	9.5	2.20	49	5	9	--	--
12... 2015	9.5	2.19	49	4	10	--	--
12... 2250	9.5	2.22	52	10	25	72	--
13... 0020	9.0	2.27	55	15	39	63	--
13... 0030	9.0	2.27	A55	--	--	--	--
13... 0345	9.0	2.30	60	10	33	71	--
13... 0350	--	2.30	A61	--	--	--	--
13... 0750	9.0	2.33	64	10	31	80	--
13... 0845	9.0	2.33	65	10	34	74	--
13... 1050	9.0	2.38	70	15	60	74	--
13... 1205	9.0	2.43	75	25	77	80	--
13... 1210	--	2.43	A75	--	--	--	--
13... 1235	--	2.43	76	--	--	--	1.8
13... 1545	8.5	2.42	71	15	36	75	--
13... 2255	8.5	2.36	65	9	24	78	--
14... 0230	--	2.31	A63	--	--	--	--
14... 0310	8.0	2.31	62	8	19	73	--
14... 0825	7.5	2.28	60	8	20	82	--
14... 2200	--	2.71	117	30	100	68	--
LITTLE LOST MAN CREEK NEAR ORICK							
MAR.							
12... 1150	--	1.90	A18	--	--	--	--
12... 1205	7.5	1.90	19	4	4	--	--
12... 1345	9.0	4.02	A12	480	2000	74	--
12... 1410	--	4.18	A708	--	--	--	--
12... 1430	9.0	4.11	666	700	2830	74	--
APR.							
13... 1225	--	1.75	A11	--	--	--	--
13... 1245	7.0	1.75	12	8	9	80	--
MAY.							
17... 1400	9.5	1.74	A13	--	--	--	--
17... 1420	9.5	1.74	13	2	4	--	--
JUN.							
12... 1400	11.5	1.37	2.7	2	3	--	--
12... 1510	--	1.37	A2.6	--	--	--	--
12... 1340	13.5	1.33	A2.3	--	--	--	--
12... 1400	13.5	1.33	2.1	1	2	--	--
JULY							
12... 1420	--	1.21	A.82	--	--	--	--
SEPT.							
15... 1230	13.0	1.11	A.30	--	--	--	--
11482470 LITTLE LOST MAN CREEK NEAR ORICK							
JULY, 1974							
04... 1830	--	--	--	1	1	--	--
04... 0430	--	--	--	1	1	--	--
18... 1100	--	--	A.48	--	--	--	--
18... 1430	17.0	--	A.48	--	--	--	--
18... 1730	16.5	--	A.48	--	--	--	--
19... 0025	15.0	--	A.50	--	--	--	--
19... 0430	14.0	--	A.52	--	--	--	--
19... 1030	16.0	--	A.52	--	--	--	--

TABLE 6.--Water temperature, stage, instantaneous discharge, turbidity, suspended-sediment concentration and sieve diameter percentage finer than 0.062 mm, and bedload discharge--Continued

DATE	TIME	TEMPERATURE (DEG. C.)	STAGE ABOVE BATHUM	INSTANTANEOUS DISCHARGE (FT. ³ /S)	TURBIDITY (NTU)	SUSPENDED SEDIMENT (MG/L)	SUS. SFD*	STEVE DIAM. * FINER THAN 0.062 MM	SEDIMENT BEDLOAD DIS- CHARGE (T/DAY)
							PENED MENT		
11482470 LITTLE LOST MAN CREEK NEAR ORICK--CONTINUED									
SEP., 1974									
10...	1145	17.5	--	A.16	--	--	--	--	--
10...	1430	19.0	--	A.16	--	--	--	--	--
10...	1630	17.5	--	A.12	--	--	--	--	--
10...	1730	16.5	--	A.12	--	--	--	--	--
10...	2145	14.5	--	A.16	--	--	--	--	--
11...	0515	11.5	--	A.12	--	--	--	--	--
11...	0850	12.5	--	A.14	--	--	--	--	--
OCT.									
29...	1130	--	--	--	4	10	42	--	--
NOV.									
21...	1540	9.5	2.48	--	7	24	66	--	--
MAR., 1975									
19...	1800	--	--	--	55	174	71	--	--
11482475 GENEVA CREEK NEAR ORICK									
JULY, 1974									
01...	1610	11.5	7.15	A.00	--	--	--	--	--
NOV.									
21...	1300	10.0	7.10	.01	9	11	59	--	--
21...	1345	10.0	7.22	.03	30	61	85	--	--
21...	1430	10.0	7.35	.05	50	92	65	--	--
21...	1505	9.5	7.40	.19	45	59	83	--	--
21...	1620	9.5	7.40	.19	25	54	73	--	--
21...	1755	9.5	7.39	.16	25	29	76	--	--
21...	2045	9.5	7.39	.16	20	28	87	--	--
21...	2120	9.0	7.39	.16	20	15	86	--	--
22...	0215	8.0	7.36	.14	15	8	100	--	--
22...	0515	9.5	7.35	.10	15	9	100	--	--
22...	0755	9.5	7.32	.09	15	7	80	--	--
22...	0900	9.5	7.31	.08	15	6	95	--	--
JAN., 1975									
16...	1255	8.5	7.48	.32	6	8	55	--	--
FEB.									
05...	1420	8.0	7.75	1.1	7	9	78	--	--
05...	2100	8.0	7.73	1.0	7	8	62	--	--
05...	2400	--	7.71	A.89	--	--	--	--	--
06...	0040	8.0	7.71	.87	7	10	54	--	--
06...	0400	8.0	7.70	.83	7	9	60	--	--
06...	0800	8.0	7.69	.79	6	5	--	--	--
06...	0815	--	7.69	A.78	--	--	--	--	--
06...	1535	--	7.66	.73	6	6	78	--	--
06...	2145	--	7.65	.69	6	6	65	--	--
06...	2200	--	7.65	A.74	--	--	--	--	--
08...	1950	--	7.58	A.61	--	--	--	--	--
08...	2010	--	7.57	.50	7	6	85	--	--
08...	2225	--	7.74	.92	--	--	--	--	--
08...	2230	9.0	7.75	.95	10	15	54	--	--
09...	0045	9.0	7.76	1.1	10	10	71	--	--
09...	0240	9.5	7.74	.97	9	8	75	--	--
09...	0430	9.5	7.72	.92	8	7	69	--	--
09...	0630	9.5	7.71	.87	8	7	74	--	--
09...	0740	9.5	7.71	.85	7	4	70	--	--
09...	1145	9.5	7.68	.78	7	11	73	--	--
12...	1200	9.0	7.86	1.4	6	15	54	--	--

Figure 5.--Water temperature, stage, instantaneous discharge, turbidity, suspended-sediment concentration and sieve diameter percentage finer than 0.062 mm, and bedload discharge--Continued

TIME (DATE)	TEMPER- (DEG C)	STAGE (FT) ABOVE (DATUM)	INSTAN- TANFOUS DIS- CHARGE (FT ³ /S)	TUR- BID- ITY (JTU)	SUS- PENDED SEDI- MENT (MG/L)	SUS. SFD.	SEDI- MEN-	
						% FINER THAN 0.062 MM		
11482475 GENEVA CREEK NEAR ORICK								
FEB., 1975								
12... 1605	--	7.84	A1.4	--	--	--	--	--
12... 1610	9.5	7.83	1.3	7	12	--	--	--
12... 1815	9.5	7.83	1.3	6	7	--	--	--
12... 1900	--	7.82	A1.4	--	--	--	--	--
12... 2120	9.5	7.82	1.3	7	7	--	--	--
12... 2250	9.5	7.89	1.6	8	12	--	--	--
12... 2400	9.5	7.87	1.5	8	9	--	--	--
13... 0410	--	7.88	A1.8	--	--	--	--	--
13... 0420	9.5	7.88	1.6	7	10	--	--	--
13... 0630	9.5	7.87	1.5	7	7	--	--	--
13... 0845	9.5	7.87	1.5	7	7	--	--	--
13... 1000	9.5	7.89	1.6	6	8	--	--	--
13... 1230	9.5	7.87	1.5	6	8	--	--	--
13... 1440	9.5	7.86	1.5	6	7	--	--	--
13... 1745	9.5	7.84	1.4	6	7	--	--	--
13... 2205	9.5	7.81	1.2	6	24	90	--	--
14... 0325	8.5	7.78	1.1	6	9	72	--	--
14... 0810	A.0	7.75	1.0	6	9	59	--	--
14... 0840	--	7.75	A1.2	--	--	--	--	--
15... 1130	8.0	7.54	0.40	6	4	--	--	--
MAR.								
18... 1820	9.0	8.70	8.9	60	262	58	--	--
18... 1830	--	8.70	A8.9	--	--	--	--	--
APR.								
04... 1145	7.5	7.89	1.8	10	11	81	--	--
MAY								
05... 1415	9.5	7.75	1.1	6	9	--	--	--
AUG.								
29... 1400	12.5	--	--	4	14	--	--	--
11482480 BERRY GLEN CREEK NEAR ORICK								
APR., 1974								
25... 1220	--	--	A.34	--	--	--	--	--
25... 1235	10.5	--	--	15	15	65	--	--
JAN., 1975								
13... 1015	--	--	A1.5	--	--	--	--	--
13... 1030	8.0	--	--	40	81	78	--	--
FEB.								
11... 1630	10.0	--	--	25	62	46	--	--
13... 1240	--	--	A6.2	--	--	--	--	--
13... 1300	--	--	--	70	214	51	--	--
19... 1600	--	--	A11	--	--	--	--	--
19... 1630	10.0	--	--	450	1950	58	--	--
25... 1115	9.0	--	--	25	49	77	--	--
MAR.								
06... 1430	--	--	--	20	25	75	--	--
06... 1440	--	--	A1.2	--	--	--	--	--
18... 1740	--	--	A49	--	--	--	--	--
18... 1755	9.0	--	--	1600	7650	50	--	--
19... 1815	--	--	--	550	1300	86	--	--
20... 1115	--	--	A6.2	--	--	--	--	--
20... 1125	--	--	--	290	630	89	--	--
21... 1305	--	--	AR.0	--	--	--	--	--
21... 1315	8.0	--	--	800	2600	70	--	--
APR.								
04... 1030	7.5	--	--	40	81	56	--	--
04... 1055	--	--	A.48	--	--	--	--	--
MAY								
19... 1530	15.5	--	--	15	28	64	--	--
19... 1435	--	--	A.23	--	--	--	--	--
AUG.								
29... 1200	16.5	--	--	9	11	72	--	--

TABLE 6.--Water temperature, stage, instantaneous discharge, turbidity, suspended-sediment concentration and sieve diameter percentage finer than 0.062 mm, and bedload discharge--Continued

DATE	TIME	TEMPERATURE (DEG C)	STAGE (FT) ABOVE BATIM)	INSTANTANEOUS DISCHARGE (CFT/S)	TURBIDITY (NTU)	SUSPENDED SEDIMENT (MG/L)	SUS. SEDI. SIEVF DIAM. % FINEFR THAN .062 MM	SEDIMENT LOAD (T/DAY)
							SEPT- MENt	W. FINEFR
11482500 REDWOOD CREEK AT ORICK								
JULY, 1974								
18...	1340	17.5	5.37	A61	--	--	--	--
18...	2140	17.5	5.37	A64	--	--	--	--
19...	1040	17.5	5.37	63	--	9	--	--
19...	1140	17.5	5.37	A66	--	--	--	--
19...	1130	17.5	5.37	63	2	4	--	78
NOV.								
07...	0840	11.5	5.11	38	3	10	--	--
20...	1040	10.0	5.54	113	--	4	--	--
21...	1205	12.0	5.42	90	--	7	--	--
21...	1345	--	5.44	A94	--	--	--	--
21...	1400	11.0	5.45	98	4	7	--	--
21...	1555	10.5	5.55	115	--	6	--	--
21...	1945	10.0	5.62	188	20	40	--	--
21...	2310	9.0	6.05	318	120	159	99	--
22...	1045	9.5	5.93	231	--	30	--	--
FEB., 1975								
05...	0925	6.0	8.38	2250	70	225	--	--
05...	1510	7.0	8.49	2460	75	263	--	--
05...	2015	7.5	9.29	2220	370	1440	--	--
06...	0915	--	8.00	A3000	--	--	--	--
06...	0955	8.0	8.89	2990	150	535	--	--
06...	1000	7.5	8.88	2990	140	608	--	--
06...	1010	7.5	8.88	2990	140	655	--	--
06...	1045	7.5	8.88	2990	--	--	--	6090
07...	1435	9.0	9.05	3200	180	620	--	--
08...	1010	9.0	8.04	2990	150	407	--	--
09...	0900	8.0	10.35	5300	600	2540	--	--
09...	1300	8.0	10.23	4940	600	2110	--	--
12...	0900	9.0	10.24	4960	210	1010	--	--
12...	1325	9.0	11.70	7960	700	2380	--	--
12...	1330	9.0	11.70	7960	--	2240	70	--
12...	1530	9.0	12.24	8770	700	3060	--	--
12...	1720	10.0	12.44	9220	750	3240	--	--
12...	1745	9.0	12.64	9680	750	3170	--	--
13...	0425	--	12.67	A9660	--	--	--	--
13...	1030	8.5	12.61	9610	550	1920	--	--
13...	1105	9.0	12.56	9360	--	--	--	2850
13...	1200	--	12.47	9240	--	1990	--	--
13...	1215	9.0	12.45	9240	460	1840	--	--
13...	1245	9.0	12.44	9220	420	1770	--	--
14...	1315	8.5	10.77	7740	220	600	--	--

6.--Water temperature, stage, instantaneous discharge, turbidity, suspended-sediment concentration and sieve diameter percentage finer than 0.062 mm, and bedload discharge--Continued

						SUS.	SFD.	STEVE	SFD1-
		TIME	TEMPER-	STAGE	INSTANT-	TUR-	SUS-	DIAFM.	MENT
			(OFG C)	ATURE	TAKEOUS	DIS-	PENDED	SEIN-	HEDLOAD
					(FT)	(FT)	(MG/L)	MM	
						(CU FT/S)		.062 MM	(T/DAY)

11532600 WEST BRANCH MILL CREEK NEAR CRESCENT CITY

MAR. 1975

10...	1140	9.5	--	--	--	932	51	--
14...	1145	9.5	--	--	170	830	55	--
14...	1410	9.5	--	--	170	PR4	55	--
18...	1530	9.5	--	--	140	588	55	--
18...	1800	9.5	--	--	100	377	60	--

11532602 WEST BRANCH MILL CREEK BELOW RED ALDER CAMPGROUND, NEAR CRESCENT CITY

MAR. 1974

26...	1510	--	--	A23	--	--	--	--
-------	------	----	----	-----	----	----	----	----

JULY

30...	1440	--	--	A1.3	--	--	--	--
31...	1905	--	--	A1.3	--	--	--	--
21...	2335	--	--	A1.3	--	--	--	--

AUG.

01...	0235	--	--	A1.3	--	--	--	--
01...	0525	--	--	A1.3	--	--	--	--
01...	0755	--	--	A1.4	--	--	--	--
01...	1000	15.0	--	A1.5	--	--	--	--
01...	1210	15.5	--	1.3	1	1	--	--
01...	1240	--	--	A1.3	--	--	--	--

SEP.

12...	1330	15.0	--	.54	1	3	--	--
12...	1355	--	--	A.54	--	--	--	--
23...	1445	14.0	--	.45	1	2	--	--
23...	1500	--	--	A.45	--	--	--	--

DEC.

06...	0045	--	F3.4R	A20	--	--	--	--
06...	0110	9.5	F3.4R	20	1	2	--	--
15...	2045	--	F2.97	A91	--	--	--	--
15...	2105	10.0	F2.97	91	3	6	67	--

JAN. 1975

06...	2320	--	F3.2B	A179	--	--	--	--
06...	2340	0.0	F3.27	175	5	12	64	--
07...	0945	--	F3.10	A156	--	--	--	--
07...	1000	9.0	F3.15	154	5	9	64	--
07...	1055	--	F3.16	A154	--	--	--	--
07...	1415	--	F3.55	A301	--	--	--	--
07...	1440	9.5	F3.88	400	25	81	59	--
07...	1845	--	F4.65	680	45	211	46	--
08...	0845	--	F3.77	A372	--	--	--	--
08...	0910	--	F3.78	375	--	--	--	20
08...	0930	9.0	F3.76	370	10	32	55	--

MAR.

17...	1725	9.0	F3.20	--	--	251	34	--
17...	1730	6.0	F3.20	--	32	213	--	--

JUNE

05...	1455	--	--	A6.3	--	--	--	--
05...	1510	14.5	--	6.3	2	3	--	--

11532605 WEST BRANCH MILL CREEK AT BRIDGE, NEAR CRESCENT CITY

OFC. 1974

06...	2100	--	21.01	A31	--	--	--	--
06...	0200	10.0	21.01	31	2	2	--	--
14...	1430	--	22.10	A120	--	--	--	--
15...	1445	11.0	22.10	120	3	8	57	--

TABLE 6.--Water temperature, stage, instantaneous discharge, turbidity, suspended-sediment concentration and sieve diameter percentage finer than 0.062 mm, and bedload discharge--Continued

DATE	TIME	TEMPER- (DEG C)	STAGE (FT)	INSTANTANEOUS DISCHARGE (CFT/S)	TURB- IDITY (NTU)	SUS- PENDED SEDIMENT (MG/L)	SUS. SED.	SEDIMENT CHARGE THAN 0.062 MM (T/DAY)
							SUS. SED.	
11532605 WEST BRANCH MILL CREEK AT BRIDGE, NEAR CRESCENT CITY--CONTINUED								
JAN., 1975								
06...	1050	--	23.06	A271	--	--	--	
06...	2040	9.5	23.06	264	8	26	54	
07...	1040	--	22.49	A213	--	--	--	
07...	1100	9.5	22.64	206	5	13	65	
07...	1400	--	23.16	A345	--	--	--	
07...	1410	10.0	23.16	744	15	57	56	
07...	1410	10.0	23.50	440	--	--	--	24
07...	2135	--	27.68	A863	--	--	--	
07...	2145	10.0	24.60	820	40	164	52	
07...	2230	--	24.58	A15	--	--	--	92
08...	0445	--	24.08	A661	--	--	--	
08...	0450	9.5	24.08	638	25	84	63	
08...	1210	--	23.62	A474	--	--	--	
08...	1220	9.5	23.60	472	10	43	54	
MAR.								
17...	1540	9.0	23.86	446	50	306	46	
17...	1700	--	24.18	A953	--	--	--	
17...	1730	9.0	24.40	645	60	385	44	
17...	1800	9.0	24.40	645	--	--	--	246
14...	0050	--	--	A827	--	--	--	
18...	0120	9.0	24.60	820	35	142	68	
18...	0125	9.0	24.60	820	--	172	54	
18...	0615	--	--	A945	--	--	--	
18...	0710	9.0	25.20	1030	65	426	49	
18...	1215	--	26.54	A1610	--	--	--	
18...	1230	--	26.70	1570	240	1140	64	
18...	1610	--	26.40	A1620	--	--	--	
18...	1630	9.5	27.60	1690	160	711	66	
18...	1645	9.5	26.70	1570	--	--	--	159
18...	2240	--	25.34	1680	75	529	41	
19...	0900	--	23.95	663	25	165	40	
19...	0950	--	23.88	A637	--	--	--	
11532610 EAST FORK MILL CREEK NEAR CRESCENT CITY								
JULY, 1974								
31...	1300	--	--	A4.1	--	--	--	
31...	1410	--	--	A4.5	--	--	--	
AUG.								
01...	0015	--	--	A4.6	--	--	--	
01...	0515	17.5	--	A3.9	--	--	--	
01...	1135	--	--	A4.2	--	--	--	
01...	1210	15.5	--	--	1	1	--	
SEP.								
12...	1315	16.5	--	A1.9	--	--	--	
12...	1325	16.5	--	1.9	1	1	--	
23...	1300	15.0	--	1.8	1	1	--	
23...	1315	15.0	--	A1.8	--	--	--	
JUNE, 1974								
05...	1300	--	--	A17	--	--	--	
05...	1315	15.5	--	17	1	4	--	
11532615 EAST FORK MILL CREEK AT BRIDGE, NEAR CRESCENT CITY								
JULY, 1974								
06...	0315	--	.32	A19	--	--	--	
06...	0450	10.0	.31	37	3	2	--	
15...	2115	--	.98	A149	--	--	--	
15...	2125	10.5	.93	149	4	6	74	

6.-Water temperature, stage, instantaneous discharge, turbidity, suspended-sediment concentration and sieve diameter percentage finer than 0.062 mm, and bedload discharge--Continued

TIME (HRS)	TEMPER- TURE (DEG C)	STAGE ABOVE DATUM	INSTANTANEOUS DISCHARGE (CFT ³ /S)	TUR- BID- ITY (JTU)	SUS.			SEDIMENT MENT
					SUS- PENDED SOLID MATERIAL (MG/L)	% FINE THAN .062 MM	BEDLOAD DIS- CHARGE (T/DAY)	

11532615 EAST FORK MILL CREEK AT BRIDGE, NEAR CRESCENT CITY--CONTINUED

JAN., 1975

1200...	1735	--	1.84 A450	--	--	--	--	--
1200...	1810	10.0	1.77 460	10	20	75	--	--
1200...	1835	10.5	1.74 460	--	--	--	--	18
1200...	1850	9.5	1.53 353	9	15	73	--	--
1200...	1850	--	2.61 A907	--	--	--	--	--
1200...	1855	10.0	2.57 470	50	180	54	--	--
1200...	1855	10.0	2.62 980	--	--	--	--	100
1200...	1900	--	2.71 A1090	--	--	--	--	--
1200...	1900	10.0	2.60 1000	25	181	24	--	--
1200...	1915	--	2.58 980	--	--	--	--	204
1200...	1920	--	2.38 A859	--	--	--	--	--
1200...	1940	9.5	2.39 798	15	84	42	--	--
1200...	1945	--	2.10 A743	--	--	--	--	--
1200...	1950	9.0	2.10 640	15	24	80	--	--
1200...	1955	9.0	2.10 640	--	32	65	--	--
1200...	1955	--	2.42 780	35	110	37	--	--
1200...	2130	--	2.80 A945	--	--	--	--	--
1200...	2215	8.5	2.85 950	--	160	53	--	--
1200...	2220	8.5	2.85 980	30	115	54	--	--
1200...	2245	9.0	2.85 988	--	--	--	--	213
1200...	0220	--	3.02 A1040	--	--	--	--	--
1200...	0250	--	3.02 1080	35	106	68	--	--
1200...	0255	--	3.02 1080	--	122	63	--	--
1200...	0750	--	4.20 1020	180	577	70	--	--
1200...	0815	--	4.45 1900	--	--	--	--	802
1200...	0845	--	4.70 A2220	--	--	--	--	--
1200...	1335	--	6.60 A3280	--	--	--	--	--
1200...	1420	--	6.60 3700	500	1740	--	--	--
1200...	1440	--	6.60 3260	--	--	--	--	1210
1200...	1840	--	4.85 A2100	--	--	--	--	--
1200...	2300	--	3.70 1540	160	704	53	--	--
1200...	1130	--	2.58 A892	--	--	--	--	--
1200...	1210	9.0	2.52 825	45	134	75	--	--

11532620 MILL CREEK NEAR CRESCENT CITY

JAN., 1974

G16...	1210	--	6.89 A2750	--	--	--	--	--
G16...	1330	--	6.95 2220	--	400	52	--	--
G16...	1420	--	-- 2800	--	--	--	--	337
FEB.								
G15...	1400	9.0	1.74 A74	--	--	--	--	.00
G15...	1440	9.0	1.75 82	--	10	58	--	--
G19...	1420	--	3.92 A972	--	--	--	--	--
G19...	1530	10.0	3.57 906	9	22	61	--	--
G19...	1615	10.0	3.53 890	--	--	--	--	34
MAR.								
G04...	1430	--	2.47 A258	--	--	--	--	--
G04...	1500	7.0	2.44 267	6	38	--	--	.00
G26...	1030	11.0	1.74 95	2	4	--	--	--
G27...	1545	10.5	1.97 111	25	25	98	--	--
G27...	2115	10.0	2.10 152	40	40	46	--	--
G24...	0745	9.5	2.12 157	9	8	--	--	--
G29...	0750	10.0	2.10 152	7	7	74	--	--
G21...	1000	--	2.00 A153	--	--	--	--	--
APR.								
G01...	1330	10.0	5.70 2610	50	207	58	--	--
G01...	1220	--	3.47 A522	--	--	--	--	--
G02...	1420	10.0	3.83 880	10	30	58	--	60

TABLE 6.--Water temperature, stage, instantaneous discharge, turbidity, suspended-sediment concentration and sieve diameter percentage finer than 0.062 mm, and bedload discharge--Continued

DATE	TIME	TEMPER- ATURE (DEG C)	STAGE ABOVE NATUM	INSTANTANEOUS DIS- CHARGE (FT ³ /S)	TUR- BID- ITY (NTU)	SUS- PENDED SUS- PEN- DENT (MG/L)	SUS- PEN- DENT DIAM. # FINER THAN .062 MM	SED- IMENT BEDLOAD DIS- CHARGE (T/DAY)
							SUS. PEN- DENT DIAM. # FINER THAN .062 MM	SED- IMENT BEDLOAD DIS- CHARGE (T/DAY)
11532620 MILL CREEK NEAR CRESCENT CITY--CONTINUED								
MAY, 1974								
15...	1315	--	1.42	A29	--	--	--	--
15...	1345	--	1.42	29	1	1	65	.00
20...	1450	--	1.39	A26	--	--	--	--
20...	1430	--	--	--	1	2	81	--
JUNE								
26...	1155	--	1.14	A11	--	--	--	--
26...	1230	14.0	1.15	12	1	1	68	--
JULY								
31...	1310	21.0	.92	A7.2	--	--	--	--
31...	1420	--	.92	A7.3	--	--	--	--
AUG.								
01...	0620	--	.92	A7.0	--	--	--	--
01...	1140	--	.92	A7.2	--	--	--	--
01...	1150	20.0	.92	7.2	1	1	--	--
SEP.								
04...	1500	--	.85	A4.1	--	--	--	--
04...	1510	19.5	.85	4.1	--	2	--	.00
12...	1130	--	.83	A3.4	--	--	--	--
12...	1200	16.0	.83	3.5	2	2	--	--
21...	1100	15.5	.80	3.7	1	2	--	.00
21...	1105	--	.82	A3.7	--	--	--	--
OCT.								
02...	1230	--	.81	A2.5	--	--	--	--
02...	1250	13.5	.81	2.5	2	2	--	--
NOV.								
12...	1330	--	1.10	AB.2	--	--	--	--
12...	1350	9.7	1.10	8.2	2	10	--	--
DEC.								
05...	2225	--	1.80	A92	--	--	--	--
05...	2300	10.0	1.80	92	3	3	--	--
15...	1745	--	2.64	A341	--	--	--	--
15...	1605	10.5	2.64	342	0	6	76	--
JAN., 1975								
06...	1635	--	3.73	A783	--	--	--	--
06...	1830	9.5	3.64	800	10	29	61	--
07...	0840	9.5	3.20	562	7	15	67	--
07...	1020	--	3.20	A556	--	--	--	--
07...	1245	9.5	3.47	703	20	38	67	--
07...	1500	9.5	4.04	1060	25	77	59	--
07...	1640	--	4.50	A1460	--	--	--	--
07...	1730	9.5	4.75	1610	50	204	55	--
07...	1920	--	--	1870	--	--	--	103
07...	2200	9.5	4.96	1780	--	168	59	--
07...	2205	9.5	4.96	1780	40	136	63	--
08...	0035	--	4.77	A1510	--	--	--	--
08...	0130	9.5	4.71	1470	30	98	62	--
08...	0335	9.5	4.59	1460	25	74	68	--
08...	0815	9.0	4.33	1270	20	46	45	--
08...	1015	--	4.22	A1180	--	--	--	--
08...	1325	9.5	4.12	1120	15	50	44	--
30...	1110	--	1.72	A69	--	--	--	--
30...	1125	5.0	1.72	70	2	2	--	.00
MAR.								
17...	1525	--	4.40	1720	45	276	49	--
17...	1740	8.5	4.24	1760	60	406	43	--
17...	1845	--	5.60	A1460	--	--	--	--
17...	1945	8.5	4.96	1770	50	286	74	--

bidity,
fine.

Table 6.--Water temperature, stage, instantaneous discharge, turbidity,
suspended-sediment concentration and sieve diameter percentage finer
than 0.062 mm, and bedload discharge--Continued

IT AD GE YI	TIME	TEMPER- (DEG C)	STAGE ABOVE DATUM	INSTAN-	TUR- BID- CHARGE (CF ³ /S)	SUS- PENDED SEDIM- ENT (MG/L)	SUS- PENDED SEDIM- ENT THAN 0.062 MM	SEDIM- ENT BEDLOAD (1/DAY)
				T			DIS- CHARGE (JTH)	% FINER THAN 0.062 MM
DATE								

11532620 MILL CREEK NEAR CRESCENT CITY--CONTINUED

MAR., 1974								
17...	2030	8.5	4.42	1750	--	--	--	342
18...	0140	8.5	5.11	1890	40	185	57	--
18...	0500	9.5	5.24	2000	40	176	50	--
18...	0640	9.5	5.44	2410	70	384	51	--
18...	0905	--	6.44	A3010	--	--	--	--
18...	0940	--	7.07	3260	200	889	54	--
18...	1015	10.0	7.23	3380	--	--	--	193
18...	1215	9.5	8.06	4070	390	1450	--	--
18...	1415	9.5	8.43	4740	360	1350	--	--
18...	1700	--	7.87	A4020	--	--	--	--
18...	1845	9.5	7.38	3400	210	786	68	--
19...	1355	--	4.35	A1290	--	--	--	--
19...	1430	9.0	4.30	1250	35	114	63	--
19...	1445	9.5	4.30	1250	--	--	--	122
APR.								
02...	1120	--	1.95	A123	--	--	--	--
02...	1140	8.5	1.95	122	4	4	60	--
MAY								
29...	1350	--	1.42	A37	--	--	--	--
29...	1410	16.0	1.42	37	2	4	--	--
JUNE								
05...	1045	14.5	1.31	28	1	3	--	--
AUG.								
01...	1520	--	.84	A6.4	--	--	--	--
01...	1540	19.5	.84	6.5	--	4	77	--

11532625 MILL CREEK AT BRIDGE, NEAR CRESCENT CITY

DEC., 1974								
05...	2145	--	--	A135	--	--	--	--
05...	2215	--	--	--	4	6	--	--
15...	1740	--	--	A370	--	--	--	--
15...	1900	11.0	--	--	5	19	58	--
JAN., 1975								
06...	1830	--	2.32	A984	--	--	--	--
06...	1900	--	2.21	900	--	--	--	3.5
06...	1945	10.0	2.21	900	10	43	56	--
07...	1600	--	2.86	A1240	--	--	--	--
07...	1630	--	3.05	1400	--	--	--	68
07...	1650	10.0	3.12	1460	30	117	55	--
08...	1255	--	2.03	A1230	--	--	--	--
08...	1310	9.0	2.75	1200	--	--	--	44
08...	1325	9.0	2.75	1200	18	52	65	--
MAR.								
17...	1625	--	3.43	A1700	--	--	--	--
17...	1700	8.5	3.68	1900	--	--	--	208
17...	1745	--	3.74	2050	60	286	60	--
18...	0925	--	5.71	A4430	--	--	--	--
18...	1015	--	6.05	4750	--	--	--	356
18...	1025	--	6.26	4840	190	794	--	--
18...	1615	9.0	7.83	7000	330	1060	--	--
19...	1410	--	3.25	1430	45	161	63	--

TABLE 6.--Water temperature, stage, instantaneous discharge, turbidity, suspended-sediment concentration and sieve diameter percentage finer than 0.062 mm, and bedload discharge--Continued

DATE	TIME (HRS C)	TEMPER- ATURE (deg C)	STAGE (FT) AHEAD DAM	INSTAN- TANOUS DIS- CHARGE (CFT/S)	TURB- ID- ITY (JTU)	SUS- PENDED SEDIMENT (MG/L)	SIEVE PERCENT FINER THAN .062 MM	SUS- PENDED SEDIMENT (MG/L)	SIEVE PERCENT FINER THAN .062 MM	SUS- PENDED SEDIMENT (MG/L)	SIEVE PERCENT FINER THAN .062 MM
						MINUT- E	%	MINUT- E	%	MINUT- E	%
11532630 MILL CREEK AT MOUTH, NEAR CRESCENT CITY											
MAR. 1 1974											
C27...	1340	10.5	--	A126	--	--	--	--	--	--	--
MAY											
20...	1650	--	--	--	A29	--	--	--	--	--	--
20...	1610	--	--	--	29	1	3	--	--	--	--
JULY											
31...	1350	--	--	--	A7.3	--	--	--	--	--	--
31...	1630	--	--	--	A7.3	--	--	--	--	--	--
31...	2100	--	--	--	A7.4	--	--	--	--	--	--
AUG.											
01...	0730	--	--	--	A7.3	--	--	--	--	--	--
01...	0730	--	--	--	A6.8	--	--	--	--	--	--
01...	1025	--	--	--	A7.1	--	--	--	--	--	--
01...	1200	22.5	--	--	7.0	0	2	--	--	--	--

TABLE 7.--Maximum-minimum water-temperature measurements, in degrees Celsius

[Location of sampling stations shown in figure 2]

Station Number	Name	Thermometer installation			Thermometer removal			Thermometer reading	
		Date	Time	Temperature	Date	Time	Temperature	Maximum	Minimum
<u>August 23-26, 1974</u>									
1482210	Bridge Creek near Orick	August 23	-	20.5	August 26	1200	-	21.5	14.0
1482225	Harry Wier Creek near Orick	August 23	-	-	August 26	1230	-	18.0	14.5
1482230	Tom McDonald Creek near Orick	August 23	-	-	August 26	1300	-	15.0	13.0
1482240	Fortyfour Creek near Orick	August 23	-	-	August 26	1400	-	14.5	12.0
1482260	Miller Creek at mouth near Orick	August 23	-	-	August 26	1500	-	15.0	13.5
	Redwood Creek at Oscar Larson Creek, near Orick	August 23	1325	22.0	August 26	-	-	22.0	16.5
1482300	Elam Creek near Orick	August 23	-	15.0	August 26	-	-	15.5	12.0
1482310	McArthur Creek near Orick	August 23	1145	13.5	August 26	-	-	16.0	12.0
1482500	Redwood Creek at Orick	August 23	1630	-	August 26	1900	-	19.5	14.0
<u>August 27-30, 1974</u>									
1482225	Harry Wier Creek near Orick	August 27	1100	-	August 30	-	-	15.0	14.0
1482250	Miller Creek near Orick	August 27	1500	-	August 30	-	-	13.5	11.5
1482260	Miller Creek at mouth, near Orick	August 27	1530	-	August 30	1455	-	14.0	13.0
	Miller Creek above C-line, near Orick	August 27	1600	-	August 30	1400	-	15.5	13.5
1482330	Hayes Creek near Orick	August 27	1900	-	August 30	1450	14.0	14.0	13.0
	Lost Man Creek above Log Jam, near Orick	August 27	1730	-	August 30	1215	15.0	16.5	15.0
1482450	Lost Man Creek near Orick	August 27	1730	-	August 30	1150	15.0	15.0	15.0
1482468	Little Lost Man Creek at Site No. 2, near Orick	August 27	1900	-	August 30	1320	14.5	15.5	13.5
1482470	Little Lost Man Creek near Orick	August 27	1715	-	August 30	1320	15.0	17.0	15.0
1482475	Geneva Creek near Orick	August 27	1700	-	August 30	1400	13.0	14.0	12.0

TABLE 7.--Maximum-minimum water-temperature measurements, in degrees Celsius
Continued

Number	Station Name	Thermometer installation			Thermometer removal			Thermometer reading	
		Date	Time	Temperature	Date	Time	Temperature	Maximum	Minimum
<u>September 3-9, 1974</u>									
	Redwood Creek at Highway 299, near Blue Lake	September 3	1630	25.5	September 8	0930	16.0	26.5	15.5
	Minor Creek near Blue Lake	September 4	1100	22.0	September 8	1015	18.0	-	
11482020	Redwood Creek at Redwood Valley Bridge, near Blue Lake	September 4	1130	24.0	September 8	1000	19.0	28.0	16.0
11482110	Lacks Creek near Orick Lacks Creek at mouth, near Orick	September 4	1030	19.5	September 8	1100	20.5	25.0	15.5
		September 4	1030	23.0	September 8	1115	-	26.0	16.0
11482120	Redwood Creek above Panther Creek, near Orick	September 3	1415	24.0	September 8	1145	21.5	24.5	16.5
	Devils Creek near Orick	September 3	1330	14.0	September 8	1100	14.0	15.0	13.5
11482160	Copper Creek near Orick	September 3	-	-	September 8	1000	18.0	22.0	15.5
<u>September 10-16, 1974</u>									
11482220	Redwood Creek at Harry Wier Creek, near Orick	September 11	-	-	September 16	1430	20.0	24.5	16.5
11482225	Harry Wier Creek near Orick	September 11	-	-	September 16	1330	13.0	20.0	12.0
11482250	Miller Creek near Orick	September 12	1145	13.5	September 16	1330	12.0	14.5	11.5
11482260	Miller Creek at mouth, near Orick	September 11	-	-	September 16	1430	12.0	12.5	11.5
	Miller Creek above C-line, near Orick	September 12	1230	-	September 16	1300	13.0	15.0	12.0
11482330	Hayes Creek near Orick	September 10	1515	15.5	September 16	1000	12.0	18.0	11.5
11482468	Little Lost Man Creek at Site No. 2, near Orick	September 11	-	-	September 16	1100	13.5	16.0	11.5
114H2470	Little Lost Man Creek near Orick	September 11	-	-	September 16	1030	14.0	17.0	12.0

Particle Size

Particle size is the diameter, in millimeters, of suspended sediment or material. The size distribution of both suspended and bedload material is important in computing the total sediment transported by the stream.

Particle-size distribution was determined either by sieve or sedimentation method. The sieve method measures the mean diameter of the particle. The sedimentation method determines the fall diameter of a particle in distilled water. The fall diameter of a particle is the diameter of a sphere with a specific gravity of 2.65 that would have the same standard fall velocity as the particle.

Selected suspended-sediment samples were analyzed to determine the percentage of particles, by weight, finer than a sieve diameter of 0.062 mm. This analysis is commonly referred to as a "sand break" and is extremely useful in assessing the quality of the suspended-sediment samples. The sand peaks, in conjunction with the particle-size analysis, are used in evaluating the percentage and distribution of sand transported downstream.²

All sediment samples were shipped to the Geological Survey sediment laboratory in Sacramento, Calif., for analysis. Sediment samples selected for particle-size distribution and sand break analyses were analyzed using procedures described by Guy (1969). The results of the analyses are listed in tables 6, 8, and 9.

²Sand break analyses were made from selected suspended-sediment samples collected prior to April 11, 1974, but were not published in Iwatsubo and Others, 1975. These unlisted analyses are in the files of the California District Chief, U.S. Geological Survey, Water Resources Division, Menlo Park, Calif., and are available upon request.

TABLE 8.--Particle-size distribution

[See figures 2 and 4 for location of stations. That the sample was collected automatically sample collection indicates auxiliary data this study, and thus precedes April 11, 1974. All samples had sieve diameter 100 percent]

DATE	TIME	TEMPERATURE (DEG C)	CHARGE (CFT ³ /S)	INSTANTANEOUS PENEDO RATE (MG/L)	SUS. SED.							
					SUS. DIAM. THAN .002 MM	SUS. DIAM. THAN .004 MM	SUS. DIAM. THAN .008 MM	SUS. DIAM. THAN .016 MM	SUS. DIAM. THAN .031 MM	SUS. DIAM. THAN .062 MM	SUS. DIAM. THAN .062 MM	
11482020 REDWOOD CREEK AT REDWOOD VALLEY BRIDGE NEAR BLUE LAKE												
FEB., 1975												
05...	1610	5.5	1350	1290	19	28	39	52	66	74	--	--
14...	1120	7.0	1850	876	16	22	31	40	50	--	56	--
28...	1615	--	475	211	--	--	--	--	--	--	--	95
MAR.												
01...	1315	8.5	780	430	415	--	--	--	--	--	--	89
07...	1500	9.5	560	570	--	--	--	--	--	--	--	86
19...	1410	--	5500	2120	26	38	51	65	77	--	86	--
22...	1310	6.5	2350	1830	15	21	27	41	52	--	--	60
11482110 LACKS CREEK NEAR ORICK												
FEB., 1975												
05...	0200	7.0	572	88	--	--	--	--	--	--	--	75
05...	1430	6.0	280	502	28	35	44	55	67	--	--	74
09...	1400	7.0	439	323	--	--	--	--	--	--	--	67
12...	1200	9.0	1710	3900	16	22	30	39	51	--	--	60
19...	1215	9.0	1620	5880	25	26	37	48	61	--	--	69
MAR.												
20...	1425	--	490	1780	24	31	40	49	58	--	--	64
11482120 REDWOOD CREEK ABOVE PANTHER CREEK NEAR ORICK												
NOV., 1974												
22...	1030	8.0	152	263	40	67	83	93	95	--	--	95
FEB., 1975												
06...	1440	7.5	1740	440	24	31	41	51	61	--	--	67
09...	1110	8.0	3400	1920	18	25	35	46	58	--	--	--
13...	1640	10.0	4650	1480	16	23	32	42	53	--	--	--
11482160 COPPER CREEK NEAR ORICK												
OCT., 1974												
14...	01200	--	33	2940	27	30	38	53	66	--	--	75
MAR., 1975												
20...	1320	7.5	54	1840	36	42	51	62	72	--	--	78
APR.												
10...	1200	--	7.4	813	--	--	--	--	--	--	--	96
11482190 SLIDE CREEK NEAR ORICK												
FEB., 1975												
13...	1545	9.0	75	221	--	--	--	--	--	--	--	62
14...	0900	7.0	65	115	--	--	--	--	--	--	--	65
MAR.												
14...	1230	9.5	--	12200	19	24	34	45	57	70	--	--
11482200 REDWOOD CREEK AT SOUTH PARK BOUNDARY NEAR ORICK												
FEB., 1975												
06...	1215	7.0	2030	739	15	17	23	29	34	--	--	38
07...	1155	7.0	2580	1060	14	18	25	33	39	--	--	45
12...	1525	8.5	8130	3830	16	24	33	46	59	--	--	--
13...	1130	8.0	7150	1910	15	21	29	38	48	--	--	54
13...	1630	8.0	6450	1490	15	24	34	45	58	--	--	--
14...	1130	6.5	6360	1670	12	17	22	27	34	--	--	39

suspended sediment

preceding time of sample collection indicates single-stage sampler. G, preceding date of selected prior to establishment of station for beginning date of data released in this report.
[or than 4.00 mm]

| SUS. |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| SED. |
| STEVF |
| DIAM. |
| % FINER |
| THAN |
.062 MM	.125 MM	.250 MM	.250 MM	.500 MM	.500 MM	1.00 MM	1.00 MM	2.00 MM	2.00 MM	2.00 MM	2.00 MM
56	--	84	--	94	--	99	--	100	--	--	--
95	--	--	64	--	77	--	86	--	95	--	100
89	--	--	98	--	100	--	--	--	--	--	--
86	--	--	94	--	97	--	100	--	--	--	--
86	--	--	93	--	99	--	100	--	--	--	--
60	--	--	93	--	98	--	99	--	100	--	--
--	--	--	68	--	77	--	80	--	88	--	96

11482020 REDWOOD CREEK AT REDWOOD VALLEY BRIDGE NEAR BLUE LAKE--CONTINUED

--	--	--	--	--	--	--	--	--	--	--	--
56	--	84	--	94	--	99	--	100	--	--	--
95	--	--	64	--	77	--	86	--	95	--	100
89	--	--	98	--	100	--	--	--	--	--	--
86	--	--	94	--	97	--	100	--	--	--	--
86	--	--	93	--	99	--	100	--	--	--	--
60	--	--	93	--	98	--	99	--	100	--	--
--	--	--	68	--	77	--	80	--	88	--	96

11482110 LACKS CREEK NEAR ORICK--CONTINUED

--	--	--	--	--	--	--	--	--	--	--	--
75	--	81	--	88	--	94	--	100	--	--	--
74	--	78	--	82	--	88	--	92	--	--	100
--	--	80	--	96	--	100	--	--	--	--	--
60	--	--	74	--	84	--	94	--	99	--	100
--	--	81	--	91	--	97	--	100	--	--	--
64	--	--	68	--	72	--	77	--	82	--	98

11482120 REDWOOD CREEK ABOVE PANTHER CREEK NEAR ORICK--CONTINUED

--	--	--	--	--	--	--	--	--	--	--	--
95	--	--	95	--	96	--	97	--	100	--	--
67	--	--	74	--	86	--	97	--	100	--	--
--	--	78	--	90	--	98	--	100	--	--	--
--	--	72	--	88	--	98	--	100	--	--	--

11482160 COPPER CREEK NEAR ORICK--CONTINUED

--	--	--	--	--	--	--	--	--	--	--	--
75	--	84	--	90	--	95	--	96	--	--	96
78	--	83	--	89	--	94	--	98	--	--	100
96	--	99	--	100	--	--	--	--	--	--	--
62	--	69	--	78	--	85	--	94	--	--	100
65	--	73	--	82	--	91	--	100	--	--	--
--	--	85	--	96	--	100	--	--	--	--	--

11482190 SLIDE CREEK NEAR ORICK--CONTINUED

--	--	--	--	--	--	--	--	--	--	--	--
62	--	69	--	78	--	85	--	94	--	--	100
65	--	73	--	82	--	91	--	100	--	--	--
--	--	85	--	96	--	100	--	--	--	--	--
38	--	43	--	52	--	65	--	79	--	--	88
45	--	49	--	57	--	72	--	88	--	--	99
--	--	60	--	90	--	99	--	100	--	--	--
56	--	63	--	71	--	81	--	93	--	--	97
--	--	61	--	90	--	98	--	100	--	--	--
39	--	47	--	58	--	69	--	84	--	--	94

11482200 REDWOOD CREEK AT SOUTH PARK BOUNDARY NEAR ORICK--CONTINUED

--	--	--	--	--	--	--	--	--	--	--	--
46	--	43	--	52	--	65	--	79	--	--	88
--	--	49	--	57	--	72	--	88	--	--	99
54	--	60	--	90	--	99	--	100	--	--	--
--	--	63	--	71	--	81	--	93	--	--	97
43	--	61	--	90	--	98	--	100	--	--	--
--	--	47	--	58	--	69	--	84	--	--	94

TABLE 8.--Particle-size distribution

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS DIS- CHARGE (CF ³ /S)	SUS- PENDED SEDIMENT (MG/L)	SUS. SED.								
					FALL & FINER THAN .002 MM	FALL & FINER THAN .004 MM	FALL & FINER THAN .008 MM	FALL & FINER THAN .016 MM	FALL & FINER THAN .031 MM	FALL & FINER THAN .062 MM	FALL & FINER THAN .062 MM	FALL & FINER THAN .062 MM	
11482210 BRIDGE CREEK NEAR ORICK													
FFR., 1975													
13...	1340	--	285	589	--	--	--	--	--	--	44	--	
MAR.,													
26...	1325	9.0	200	4620	10	14	22	30	39	47	--	--	
APR.,													
02...	1340	--	68	963	8	11	18	25	32	--	43	--	
11482220 REDWOOD CREEK ABOVE HARRY WIER CREEK NEAR ORICK													
FFR., 1975													
07...	1215	7.5	2600	675	19	31	44	57	68	76	--	--	
12...	1440	--	8600	3840	15	20	29	40	52	60	--	--	
13...	1525	--	6030	1750	14	22	31	40	50	58	--	--	
14...	0845	--	4600	1150	14	22	31	41	49	58	--	--	
11482225 HARRY WIER CREEK NEAR ORICK													
NOV., 1974													
07...	1100	10.0	3.0	85	--	--	--	--	--	--	--	--	96
JAN., 1975													
05...	C1400	--	--	918	39	50	65	81	93	--	97	--	
FFR.,													
12...	2130	10.0	97	807	36	45	58	70	77	--	82	--	
13...	0030	9.5	113	465	33	36	44	52	61	--	67	--	
13...	0540	9.5	94	158	--	--	--	--	--	--	59	--	
13...	1230	9.0	90	88	--	--	--	--	--	--	75	--	
MAR.,													
21...	1250	--	--	4080	20	27	36	45	58	--	65	--	
APR.,													
03...	1045	7.0	11.	357	--	--	--	--	--	--	--	--	99
11482230 TOM MCDONALD CREEK NEAR ORICK													
FFR., 1975													
20...	1115	7.0	177	124	--	--	--	--	--	--	--	--	62
11482240 FORTYFOUR CREEK NEAR ORICK													
MAR., 1975													
25...	1525	9.5	95	144	--	--	--	--	--	--	--	--	64
11482250 MILLER CREEK NEAR ORICK													
NOV., 1974													
07...	1030	--	1.1	172	--	--	--	--	--	--	--	--	97
21...	1455	9.5	4.6	915	70	86	94	98	99	--	100	--	
FFR., 1975													
12...	2130	10.0	17	245	--	--	--	--	--	--	--	--	78
13...	0530	9.5	19	148	--	--	--	--	--	--	--	--	60
13...	0940	9.5	20	130	--	--	--	--	--	--	--	--	81
MAR.,													
25...	1305	--	31	641	24	31	39	49	59	--	66	--	
11482260 MILLER CREEK AT MOUTH NEAR ORICK													
NOV., 1974													
21...	1530	9.5	6.3	104	--	--	--	--	--	--	--	--	86
21...	1610	9.0	5.9	453	37	43	57	73	84	--	90	--	
21...	1715	9.0	5.0	813	72	84	90	95	98	--	98	--	
21...	1830	9.0	4.4	1460	78	86	94	98	99	--	100	--	
21...	2135	9.0	3.1	244	--	--	--	--	--	--	--	--	99

suspended sediment--Continued

SUS.	SUS.	SUS.	SUS.	SUS.	SUS.	SUS.	SUS.	SUS.	SUS.	SUS.
SED.	SED.	SED.	SED.	SED.	SED.	SED.	SED.	SED.	SED.	SED.
STEVE	STEVE	STEVE	STEVE	STEVE	STEVE	STEVE	STEVE	STEVE	STEVE	STEVE
DIAM.	DIAM.	DIAM.	DIAM.	DIAM.	DIAM.	DIAM.	DIAM.	DIAM.	DIAM.	DIAM.
FINER	FINER	FINER	FINER	FINER	FINER	FINER	FINER	FINER	FINER	FINER
THAN	THAN	THAN	THAN	THAN	THAN	THAN	THAN	THAN	THAN	THAN
062 MM	.125 MM	.125 MM	.250 MM	.250 MM	.500 MM	.500 MM	1.00 MM	1.00 MM	2.00 MM	2.00 MM

11482210 BRIDGE CREEK NEAR ORICK--CONTINUED

1975	51	--	63	--	92	--	100	--	--	--
43	58	--	79	--	95	--	100	--	--	--
--	--	52	--	66	--	86	--	96	--	100

11482220 REDWOOD CREEK ABOVE HARRY WIER CREEK NEAR ORICK--CONTINUED

1975	84	--	94	--	100	--	--	--	--	--
74	--	86	--	96	--	100	--	--	--	--
72	--	82	--	96	--	100	--	--	--	--
70	--	82	--	95	--	99	--	100	--	--

11482225 HARRY WIER CREEK NEAR ORICK--CONTINUED

1974	--	98	--	99	--	100	--	--	--	--
1975	--	99	--	99	--	100	--	--	--	--
67	--	99	--	99	--	100	--	--	--	--
59	--	86	--	99	--	94	--	99	--	100
75	--	73	--	79	--	87	--	96	--	100
65	--	64	--	69	--	78	--	92	--	100
99	--	79	--	84	--	93	--	100	--	--
MAR.	--	72	--	77	--	85	--	93	--	100
APR.	--	99	--	100	--	--	--	--	--	--
JUN.	--	99	--	100	--	--	--	--	--	--

11482230 TOM MCDONALD CREEK NEAR ORICK--CONTINUED

FEB., 1975	--	70	--	80	--	92	--	99	--	100
64	--	70	--	80	--	92	--	99	--	100

11482240 FORTYFOUR CREEK NEAR ORICK--CONTINUED

MAR., 1975	--	76	--	88	--	96	--	100	--	--
25...	--	76	--	88	--	96	--	100	--	--

11482250 MILLER CREEK NEAR ORICK--CONTINUED

NOV., 1974	--	97	--	98	--	99	--	100	--	--
78	--	--	--	--	--	--	--	--	--	--
60	--	--	--	--	--	--	--	--	--	--
81	--	--	--	--	--	--	--	--	--	--
66	--	84	--	89	--	96	--	98	--	100
12...	--	66	--	73	--	81	--	95	--	100
13...	--	89	--	95	--	99	--	100	--	--
MAR.	--	75...	--	85	--	93	--	99	--	100

11482260 MILLER CREEK AT MOUTH NEAR ORICK--CONTINUED

NOV., 1974	--	94	--	98	--	100	--	--	--	--
21...	--	94	--	97	--	99	--	100	--	--
21...	--	99	--	100	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--
21...	--	100	--	--	--	--	--	--	--	--

TABLE 8.--Particle-size distribution

DATE	TIME	TEMPER- ATURE (DEG C)	INSTANTANEOUS DTS- CHARGE (FT ³ /S)	SUS. SED.	SUS. SED.	SUS. SED.	SUS. SED.	SUS. SED.	SUS. SED.	SUS. SED.	SUS. SED.	
				SUS. MENT	FALL THAN .062 MM	FALL THAN .004 MM	FALL THAN .008 MM	FALL THAN .016 MM	FALL THAN .031 MM	FALL THAN .062 MM	FALL THAN .062 MM	
11482260 MILLER CREEK AT MOUTH NEAR ORICK												
DEC., 1974												
14... 1200	--	31	1080	--	36	44	56	68	78	--	83	
FFB., 1975												
09... 0800	9.5	14	87	--	--	--	--	--	--	--	61	
12... 1630	10.5	29	145	--	--	--	--	--	--	--	76	
12... 2150	--	36	1150	35	45	58	69	80	--	--	85	
13... 0400	9.5	44	1570	32	44	58	70	83	--	--	89	
13... 1305	9.5	37	291	--	--	--	--	--	--	--	63	
14... 0010	--	31	146	--	--	--	--	--	--	--	70	
14... 0440	7.5	27	103	--	--	--	--	--	--	--	74	
11482280 CLOQUET CREEK NEAR ORICK												
FFB., 1975												
10... 1200	9.0	66	690	28	39	52	65	77	--	84		
11482290 OSCAR LARSON CREEK NEAR ORICK												
FFB., 1975												
19... 1300	9.0	27	307	34	40	49	58	67	--	72		
11482295 GANS SOUTH CREEK NEAR ORICK												
FFB., 1975												
19... 1345	9.0	23	39	--	--	--	--	--	--	--	67	
11482300 ELAM CREEK NEAR ORICK												
DEC., 1974												
14... 1200	--	--	503	--	--	--	--	--	--	--	60	
FFB., 1975												
19... 1500	9.0	80	157	--	--	--	--	--	--	--	80	
11482330 HAYES CREEK NEAR ORICK												
FFB., 1975												
19... 1430	9.5	29	233	--	--	--	--	--	--	--	66	
11482450 LOST MAN CREEK NEAR ORICK												
FFB., 1974												
12... 2230	9.0	88	69	--	--	--	--	--	--	--	85	
13... 0025	8.5	99	88	--	--	--	--	--	--	--	73	
MAR.												
18... 1130	8.0	1000	3780	10	25	34	46	57	66	--	--	
21... 1400	--	185	963	21	27	35	45	56	66	--	66	
11482460 LARRY DAMM CREEK NEAR ORICK												
MAR., 1975												
19... 1230	10.5	265	1580	24	29	39	49	60	--	69		
11482468 LITTLE LOST MAN CREEK AT SITE NO. 2 NEAR ORICK												
FFB., 1975												
19... 1205	9.0	75	77	--	--	--	--	--	--	--	80	
MAR.												
18... 1345	9.0	612	2080	23	30	40	53	66	--	76		
18... 1410	9.0	666	2870	24	31	41	53	65	--	74		

suspended sediment--Continued

tion

SUS.
SED.
TEVE
TAM.
FINER
MAN
12 MM

	SUS.										
	SED.										
	FALL	STEVF	FALL								
	DIAM.										
	% FINER										
	THAN										
	DATE	.125 MM	.125 MM	.250 MM	.250 MM	.500 MM	.500 MM	1.00 MM	1.00 MM	2.00 MM	2.00 MM

11482260 MILLER CREEK AT MOUTH NEAR ORICK--CONTINUED

DEC., 1974											
JAN...	--	91	--	96	--	99	--	100	--	--	--
FEB., 1975											
83	--	64	--	68	--	73	--	82	--	100	
74	--	80	--	85	--	91	--	96	--	100	
61	--	89	--	92	--	94	--	96	--	100	
76	--	93	--	95	--	96	--	98	--	100	
85	--	67	--	72	--	76	--	86	--	100	
89	--	76	--	81	--	86	--	92	--	100	
63	--	81	--	87	--	93	--	97	--	100	
70											
74											

11482280 CLOQUET CREEK NEAR ORICK--CONTINUED

JAN...	--	90	--	94	--	98	--	100	--	--	--
11482290 OSCAR LARSON CREEK NEAR ORICK--CONTINUED											
JAN...	--	78	--	84	--	91	--	97	--	98	
72											

11482295 GANS SOUTH CREEK NEAR ORICK--CONTINUED

JAN...	--	69	--	73	--	77	--	78	--	100	
11482300 ELAM CREEK NEAR ORICK--CONTINUED											

DEC., 1974											
JAN...	--	65	--	70	--	82	--	95	--	100	
FEB., 1975											
60	--	84	--	87	--	89	--	94	--	100	
80											

11482330 HAYES CREEK NEAR ORICK--CONTINUED

JAN...	--	71	--	78	--	88	--	98	--	100	
11482450 LOST MAN CREEK NEAR ORICK--CONTINUED											

FFB., 1975											
12...	--	90	--	94	--	98	--	100	--	--	--
13...	--	82	--	88	--	92	--	95	--	100	
MAR.											
18...	75	--	85	--	98	--	100	--	--	--	100
21...	--	75	--	83	--	88	--	93	--	--	

11482460 LARRY DAMM CREEK NEAR ORICK--CONTINUED

MAR., 1975											
18...	--	83	--	97	--	99	--	100	--	--	--
11482468 LITTLE LOST MAN CREEK AT SITE NO. 2 NEAR ORICK--CONTINUED											
FFB., 1975											
13...	--	87	--	92	--	96	--	100	--	--	--
MAR.											
18...	--	85	--	94	--	98	--	100	--	--	--
18...	--	83	--	93	--	98	--	100	--	--	--

TABLE 8.--Particle-size distribution

DATE	TIME	TEMPERATURE (DEG C)	INSTANTANEOUS DISCHARGE (CF ³ /S)	SUS. SED.	SUS. SED.	SUS. SED.	SUS. SED.	SUS. SED.	SUS. SED.	SUS. SED.	SUS. SED.	
				INSTANTANEOUS PENETRATION MENT	FALL DIAM. % FINER THAN .0002 MM	FALL DIAM. % FINER THAN .0004 MM	FALL DIAM. % FINER THAN .0008 MM	FALL DIAM. % FINER THAN .016 MM	FALL DIAM. % FINER THAN .031 MM	FALL DIAM. % FINER THAN .062 MM	FALL DIAM. % FINER THAN .062 MM	
11482480 BERRY GLEN CREEK NEAR ORICK												
FEB., 1975												
19...	1630	10.0	--	1950	19	25	33	41	51	--	58	
MAR.												
18...	1755	9.0	--	7650	16	21	27	34	43	--	50	
19...	1815	--	--	1300	--	--	--	--	--	--	86	
11482500 REDWOOD CREEK AT ORICK												
NOV., 1974												
21...	2310	9.0	318	159	44	61	78	90	96	--	99	
FEB., 1975												
06...	1010	7.5	2900	655	16	22	30	39	47	54	--	
12...	1310	9.0	7960	2290	15	23	36	46	59	--	70	
13...	1200	--	9290	1990	15	24	33	45	55	62	--	
11532600 WEST BRANCH MILL CREEK NEAR CRESCENT CITY												
MAR., 1975												
18...	1145	9.5	--	830	--	--	--	--	--	--	55	
11532602 WEST BRANCH MILL CREEK BELOW RED ALDER CAMPGROUND, NEAR CRESCENT CITY												
JAN., 1975												
07...	1440	9.5	400	81	--	--	--	--	--	--	59	
07...	1645	--	680	211	--	--	--	--	--	--	46	
MAR.												
17...	1730	9.0	--	213	--	--	--	--	--	39	--	
11532605 WEST BRANCH MILL CREEK AT BRIDGE NEAR CRESCENT CITY												
JAN., 1975												
07...	1410	10.0	344	57	--	--	--	--	--	--	56	
07...	2145	10.0	820	164	--	--	--	--	--	--	52	
08...	0450	9.5	638	84	--	--	--	--	--	--	63	
08...	1220	9.5	472	43	--	--	--	--	--	--	54	
MAR.												
17...	1730	9.0	445	385	--	--	--	--	--	--	44	
18...	0120	9.0	820	142	--	--	--	--	--	--	68	
18...	0710	9.0	1030	426	--	--	--	--	--	--	49	
18...	1430	9.5	1640	711	17	24	33	43	55	--	66	
19...	0400	--	663	165	--	--	--	--	--	--	40	
11532615 EAST FORK MILL CREEK AT BRIDGE NEAR CRESCENT CITY												
JAN., 1975												
07...	2355	10.0	1000	181	--	--	--	--	--	--	24	
08...	0540	9.5	794	84	--	--	--	--	--	--	42	
08...	1300	9.0	640	26	--	--	--	--	--	--	80	
MAR.												
17...	2220	9.5	980	115	--	--	--	--	--	--	54	
18...	0750	--	1820	577	22	28	38	50	62	--	70	
18...	1420	--	3300	1740	21	29	38	49	62	72	--	
19...	1210	9.0	825	134	--	--	--	--	--	--	75	

suspended sediment--Continued

| SUS. |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| SED. |
| STEVE | STEVE | FALL | SIEVE |
| DIAM. |
| % FINEH |
| THAN |
| .062 MM | .125 MM | .125 MM | .250 MM | .250 MM | .500 MM | .500 MM | 1.00 MM | 1.00 MM | 2.00 MM | 2.00 MM | 2.00 MM |

11482480 BERRY GLEN CREEK NEAR ORICK--CONTINUED

58.	--	67	--	76	--	87	--	94	--	98	
50.	--	59	--	72	--	86	--	95	--	99	
86	--	93	--	98	--	100	--	--	--	--	

11482500 REDWOOD CREEK AT ORICK--CONTINUED

99.	--	99	--	100	--	--	--	--	--	--	
99.	--	66	--	80	--	96	--	100	--	--	
70.	--	86	--	98	--	100	--	--	--	--	
--	--	73	--	84	--	95	--	100	--	--	

11532600 WEST BRANCH MILL CREEK NEAR CRESCENT CITY--CONTINUED

55.	--	69	--	88	--	99	--	100	--	--	
11532602	WEST BRANCH MILL CREEK BELOW RED ALDER CAMPGROUND NEAR CRESCENT CITY--CONTINUED										

59.	--	71	--	87	--	97	--	100	--	--	
46.	--	56	--	73	--	93	--	100	--	--	
--	--	52	--	76	--	100	--	--	--	--	

11532605 WEST BRANCH MILL CREEK AT BRIDGE NEAR CRESCENT CITY--CONTINUED

56.	--	73	--	88	--	98	--	100	--	--	
52.	--	64	--	74	--	90	--	82	--	89	
63.	--	73	--	86	--	95	--	100	--	--	
54.	--	62	--	71	--	82	--	86	--	100	
MAR.											
44.	--	55	--	69	--	79	--	89	--	93	
68.	--	77	--	91	--	98	--	100	--	--	
49.	--	62	--	79	--	91	--	94	--	96	
66.	--	80	--	93	--	99	--	100	--	--	
40.	--	54	--	75	--	94	--	100	--	--	

11532615 EAST FORK MILL CREEK AT BRIDGE NEAR CRESCENT CITY--CONTINUED

24.	--	28	--	32	--	45	--	83	--	97	
42.	--	49	--	52	--	61	--	87	--	100	
80.	--	43	--	85	--	90	--	100	--	--	
MAR.											
54.	--	62	--	72	--	86	--	100	--	--	
70.	--	82	--	93	--	99	--	100	--	--	
--	--	83	--	91	--	99	--	100	--	--	
75.	--	81	--	88	--	96	--	100	--	--	

TABLE 8.--Particle-size distribution

DATE	TIME	TEMPER- ATURE (DEG C)	ATMOPH- IC CHARGE (FT ³ /S)	INSTAN- TANEOUS FALL RATE (MG/L)	SUS. SED.	SUS. SED.	SUS. SED.	SUS. SED.	SUS. SED.	SUS. SED.	SUS. SED.	
					FALL PENED. SEMI- FALL MNT. THAN	FALL DIAM. SEMI- FALL MNT. THAN	FALL DIAM. SEMI- FALL MNT. THAN	FALL DIAM. SEMI- FALL MNT. THAN	FALL DIAM. SEMI- FALL MNT. THAN	FALL DIAM. SEMI- FALL MNT. THAN	FALL DIAM. SEMI- FALL MNT. THAN	
11532620 MILL CREEK NEAR CRESCENT CITY												
JAN., 1974												
G16...	1330	--	2820	400	14	21	29	39	48	--	52	
FF4...												
G14...	1530	10.0	406	22	--	--	--	--	--	--	61	
MAR.												
G01...	1330	10.0	2010	207	--	--	--	--	--	--	58	
G02...	1420	10.0	444	30	--	--	--	--	--	--	58	
JAN., 1975												
07...	1710	9.5	1610	204	--	--	--	--	--	--	55	
07...	2205	9.5	1780	136	--	--	--	--	--	--	63	
08...	0815	9.0	1270	46	--	--	--	--	--	--	65	
MAR.												
17...	1445	8.5	1770	286	--	--	--	--	--	--	38	
14...	0500	9.5	2000	176	--	--	--	--	--	--	50	
14...	0940	--	3260	884	16	24	31	39	50	--	58	
18...	1215	9.5	4070	1450	22	31	40	52	64	74	--	
18...	1515	9.5	4790	1350	22	30	39	51	64	73	--	
18...	1845	9.5	3500	786	20	27	37	47	58	--	68	
19...	1430	9.0	1250	114	--	--	--	--	--	--	63	
11532626 MILL CREEK AT BRIDGE NEAR CRESCENT CITY												
JAN., 1975												
07...	1650	10.0	1460	117	--	--	--	--	--	--	55	
MAR.												
18...	1025	--	4840	794	18	27	37	48	61	72	--	
18...	1615	9.0	7000	1060	22	31	47	49	67	77	--	

suspended sediment--Continued

SUS. SED. SIEVE DIAM. % FINER THAN .062 MM	SUS. SED. FALL DIAM. % FINER THAN .125 MM						

11532620 MILL CREEK NEAR CRESCENT CITY--CONTINUED

52	474	--					
61	--	62	--	73	--	87	--
58	--	68	--	79	--	90	--
58	--	66	--	85	--	93	--
55	--	67	--	78	--	88	--
63	1975	--					
65	--	69	--	82	--	92	--
38	--	73	--	83	--	92	--
50	--	74	--	84	--	96	--
58	--	46	--	55	--	61	--
--	--	54	--	73	--	85	--
--	--	69	--	80	--	89	--
68	--	84	--	94	--	100	--
63	--	84	--	92	--	100	--
--	--	80	--	90	--	97	--
--	--	76	--	88	--	97	--

11532626 MILL CREEK AT BRIDGE NEAR CRESCENT CITY--CONTINUED

55	1975	--					
--	--	63	--	74	--	86	--
--	--	83	--	100	--	98	--
--	--	86	--	100	--	98	--

TABLE 9.--Particle-size

[See figures 2 and 4 for location of stations.
auxiliary data collected prior to establishment
April 11, 1974, the beginning date of data

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS DIS- CHARGE (FT ³ /S)	SED.	SED.	SED.	SED.
				MENT BEDLOAD	SIEVE DIAM.	SIEVE DIAM.	SIEVE DIAM.
11482020 REDWOOD CREEK AT REDWOOD VALLEY BRIDGE, NEAR BLUE LAKE							
FEB., 1975							
05...	1630		--	1350	4090	--	--
14...	1200		--	1850	6430	--	--
MAR.							
22...	1350		--	2350	14700	--	--
11482120 REDWOOD CREEK ABOVE PATHER CREEK, NEAR ORICK							
NOV., 1974							
22...	1050		8.0	152	76	--	--
FEB., 1975							
06...	1605		--	1740	3700	--	--
09...	1145		--	3400	4800	--	--
13...	1705		--	4650	4420	--	--
11482200 REDWOOD CREEK AT SOUTH PARK BOUNDARY, NEAR ORICK							
FEB., 1975							
07...	1115		--	2600	4620	--	--
09...	1010		7.0	4610	6900	--	--
	1400		8.0	7180	3430	--	--
11482210 BRIDGE CREEK NEAR ORICK							
JAN., 1975							
09...	1345		--	230	172	--	--
11482220 REDWOOD CREEK ABOVE HARRY WIER CREEK, NEAR ORICK							
FEB., 1975							
07...	1240		7.5	2600	4700	--	--
09...	1130		--	4300	1360	--	1
13...	1600		--	6030	18200	--	--
11482225 HARRY WIER CREEK NEAR ORICK							
FEB., 1975							
08...	2330		8.5	40	1.3	--	1
12...	2150		10.0	102	30	--	1
13...	0035		9.5	112	28	1	1
13...	0250		9.5	99	16	--	3
13...	0555		9.5	98	10	--	1
13...	1240		9.0	89	3.1	--	4
11482230 TOM MCDONALD CREEK NEAR ORICK							
JAN., 1975							
09...	1615		--	115	11	--	--
APR.							
02...	1330		--	63	2.6	--	--
11482240 FORTYFOUR CREEK NEAR ORICK							
MAR., 1975							
25...	1510		9.5	95	8.6	1	2
						12	45

cle-si
ons.
Lshment
a

bution of bedload

preceding date of sample collection indicates
ation for this study, and thus precedes
eed in this report]

SED. BEDLOAD SIEVE DIAM. % FINER THAN 500 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 32.0 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 64.0 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 76.0 MM
--	---	---	---	---	---	---	---	---

182020 REDWOOD CREEK AT REDWOOD VALLEY BRIDGE, NEAR BLUE LAKE--CONTINUED

JAN., 1975

15	31	48	62	73	82	92	100
11	28	45	64	80	89	99	100
8	15	26	48	72	90	100	--

11482120 REDWOOD CREEK ABOVE PANTHER CREEK, NEAR ORICK--CONTINUED

JAN., 1974

11	41	64	79	88	100	--	--
----	----	----	----	----	-----	----	----

JAN., 1975

14	32	54	73	87	97	100	--
31	35	50	66	70	91	100	--
19	36	53	70	83	89	97	100

11482200 REDWOOD CREEK AT SOUTH PARK BOUNDARY, NEAR ORICK--CONTINUED

JAN., 1975

15	37	60	78	88	95	100	--
15	30	52	74	89	95	99	100
24	39	55	70	87	97	100	--

11482210 BRIDGE CREEK NEAR ORICK--CONTINUED

JAN., 1975

22	51	72	83	89	94	100	--
----	----	----	----	----	----	-----	----

11482220 REDWOOD CREEK ABOVE HARRY WIER CREEK, NEAR ORICK--CONTINUED

JAN., 1975

9	20	38	61	75	88	100	--
35	46	54	64	76	86	100	--
12	24	44	65	82	92	99	100

11482225 HARRY WIER CREEK NEAR ORICK--CONTINUED

FEB., 1975

43	67	87	96	100	--	--	--
36	54	71	85	92	100	--	--
28	41	50	57	64	74	100	--
28	46	61	79	95	100	--	--
37	61	77	87	92	100	--	--
48	77	93	97	100	--	--	--

11482230 TOM McDONALD CREEK NEAR ORICK--CONTINUED

JAN., 1975

22	45	70	87	96	100	--	--
39	69	88	99	100	--	--	--

11482240 FORTYFOUR CREEK NEAR ORICK--CONTINUED

MAR., 1975

25...	66	80	89	97	100	--	--
-------	----	----	----	----	-----	----	----

TABLE 9.--Particle-size

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS DIS- CHARGE (FT ³ /S)	BEDLOAD DIS- CHARGE (T/DAY)	SED.	SED.	SED.	SED.
					MENT	BEDLOAD	SIEVE DIAM.	BEDLOAD
					.062 MM	.125 MM	.250 MM	.500 MM
11482250 MILLER CREEK NEAR ORICK								
FEB., 1975								
08...	2145	9.5	8.5	1.1	--	--	2	9
12...	1510	10.0	12	2.2	1	1	3	15
12...	2130	10.0	17	3.9	1	1	5	20
13...	0025	10.0	20	3.0	1	1	7	23
13...	0905	9.5	20	2.9	1	1	5	26
13...	1135	--	20	1.4	1	1	6	25
MAR.								
25...	1310	--	31	520	1	1	1	3
11482260 MILLER CREEK AT MOUTH, NEAR ORICK								
FEB., 1975								
12...	1820	10.0	28	6.3	--	1	2	8
12...	2200	10.0	36	14	1	1	4	14
13...	0910	9.5	43	14	--	1	3	12
13...	1320	9.5	36	15	--	--	2	6
14...	0015	8.5	31	7.0	--	--	2	8
14...	0945	7.5	27	4.0	1	1	3	10
11482330 HAYES CREEK NEAR ORICK								
FEB., 1975								
19...	1440	--	29	27	1	1	3	10
MAR.								
25...	1025	--	21	70	1	1	2	4
11482450 LOST MAN CREEK NEAR ORICK								
FEB., 1975								
12...	1455	9.0	76	7.4	--	--	1	3
12...	1920	8.0	77	4.5	--	--	1	2
12...	2235	9.0	89	7.2	--	1	2	4
13...	0030	8.5	98	32	1	1	2	9
13...	0435	9.0	96	12	1	1	2	11
13...	0740	8.5	105	42	--	1	1	3
13...	1140	8.5	121	8.5	--	1	2	10
13...	1535	7.5	114	19	--	--	1	5
14...	0045	--	94	12	--	1	1	5
14...	0800	7.0	80	23	--	--	1	4
MAR.								
20...	1430	--	90	18	1	1	1	5
21...	1450	--	185	144	1	1	4	11
11482468 LITTLE LOST MAN CREEK AT SITE NO. 2 NEAR ORICK								
FEB., 1975								
13...	1235	--	76	1.8	1	1	6	22
11482500 REDWOOD CREEK AT ORICK								
FEB., 1975								
06...	1045	7.5	2990	6090	--	--	1	6
13...	1105	9.0	360	2850	--	1	6	11
11532602 WEST BRANCH MILL CREEK BELOW RED ALDER CAMPGROUND, NEAR CRESCENT CITY								
JAN., 1975								
04...	0910	--	375	20	--	--	1	3

Distribution of bedload--Continued

size

ED.
LOAD
EVE
AM.
INFR
HAN
0 MM

	SED.								
	BEDLOAD								
	SIEVE	STEVE	SIEVE						
	DIAM.								
	% FINE	% FINER	% FINER	% FINER					
	THAN								
DATE	1.00 MM	2.00 MM	4.00 MM	8.00 MM	16.0 MM	32.0 MM	64.0 MM	76.0 MM	

11482250 MILLER CREEK NEAR ORICK--CONTINUED

FEB., 1975

9	19	30	42	56	84	100	--	--
15	2...	31	47	60	80	100	--	--
20	12...	39	53	62	77	89	100	--
23	13...	37	50	65	77	90	100	--
26	13...	47	62	73	83	96	100	--
25	13...	41	51	59	70	78	83	100
MAR.								
3	25...	5	14	32	55	78	89	100

11482260 MILLER CREEK AT MOUTH, NEAR ORICK--CONTINUED

FEB., 1975

8	12...	22	45	71	90	99	100	--
14	12...	28	46	64	81	96	100	--
12	13...	24	40	57	71	83	88	100
6	13...	16	32	52	76	92	100	--
8	14...	19	38	62	85	98	100	--
10	14...	21	39	61	84	100	--	--

11482330 HAYES CREEK NEAR ORICK--CONTINUED

FEB., 1975

10	19...	27	52	76	89	91	99	100
4	25...	11	31	58	78	92	96	100

11482450 LOST MAN CREEK NEAR ORICK--CONTINUED

FEB., 1975

3	12...	9	30	60	77	91	100	--
2	12...	2	5	10	18	25	52	100
4	12...	11	31	65	92	100	--	--
9	13...	33	62	81	94	100	--	--
11	13...	32	57	74	87	92	100	--
3	13...	9	20	36	51	61	68	100
10	13...	21	35	47	62	81	100	--
5	13...	19	50	74	90	94	100	--
5	14...	12	24	38	53	65	100	--
4	14...	17	40	61	78	86	89	100
5	MAR.							
5	20...	17	41	67	86	100	--	--
11	21...	22	38	54	68	80	91	100

11482468 LITTLE LOST MAN CREEK AT SITE NO. 2 NEAR ORICK--CONTINUED

FEB., 1975

22	13...	47	70	84	94	100	--	--
----	-------	----	----	----	----	-----	----	----

11482500 REDWOOD CREEK AT ORICK--CONTINUED

FEB., 1975

5	06...	27	50	68	82	91	98	100
11	13...	34	47	59	73	86	93	100

11532602 WEST BRANCH MILL CREEK BELOW RED ALDER CAMPGROUND
NEAR CRESCENT CITY--CONTINUED

JAN., 1975

3	08...	7	23	51	72	80	100	--
---	-------	---	----	----	----	----	-----	----

TABLE 9.--Particle-size

DATE	TIME	TEMPER- ATURE (DEG C)	INSTAN- TANEOUS DIS- CHARGE (FT ³ /S)	BEDLOAD DIS- CHARGE (T/DAY)	SED.	SED.	SED.	SED.
					MENT	BEDLOAD	SIEVE	BEDLOAD
						DIAM.	DIAM.	DIAM.
11532605 WEST BRANCH MILL CREEK NEAR CRESCENT CITY								
JAN., 1975								
07...	1430	10.0	440	24	--	--	2	4
07...	2230	--	815	92	--	--	1	4
MAR.								
17...	1800	9.0	645	246	1	1	2	4
18...	1645	9.5	1570	159	--	1	2	8
11532615 EAST FORK MILL CREEK AT BRIDGE NEAR CRESCENT CITY								
JAN., 1975								
06...	1435	10.5	460	18	--	--	1	7
07...	1700	10.0	980	100	--	--	1	3
08...	0015	--	980	204	--	--	--	3
MAR.								
17...	2245	9.0	988	213	1	1	4	13
18...	0815	--	1900	802	--	--	1	3
JR...	1440	--	3260	1210	--	1	2	4
11532620 MILL CREEK NEAR CRESCENT CITY								
JAN., 1974								
G16...	1420	--	2800	337	--	--	3	6
FER.								
GJ9...	1615	10.0	890	34	--	--	3	8
APR.								
G02...	1420	10.0	889	60	--	--	1	6
JAN., 1975								
07...	1920	--	1870	103	--	--	2	9
MAR.								
17...	2030	8.5	1750	342	--	--	3	8
18...	1015	10.0	3380	193	1	1	7	21
19...	1445	9.5	1250	122	--	--	--	2
11532626 MILL CREEK AT BRIDGE NEAR CRESCENT CITY								
JAN., 1975								
06...	1900	--	900	3.5	--	--	1	4
07...	1630	--	1400	68	--	--	1	9
08...	1310	9.0	1200	44	--	--	--	1
MAR.								
17...	1700	8.5	1900	208	--	--	1	5
18...	1015	--	4750	356	--	1	3	8

distribution of bedload--Continued

SED.
BEDLOAD
SIEVE
DIAM.
5 FINER
THAN
500 MM

	SED.								
	BEDLOAD								
	SIEVE								
	DIAM.								
	% FINE								
	THAN								
DATE	1.00 MM	2.00 MM	4.00 MM	8.00 MM	16.0 MM	32.0 MM	64.0 MM	76.0 MM	

11532605 WEST BRANCH MILL CREEK NEAR CRESCENT CITY--CONTINUED

JAN., 1975

07...	5	11	12	26	33	39	100	--
07...	7	26	50	66	75	87	100	--
MAR.								
17...	6	10	12	16	29	50	86	100
18...	15	24	34	50	64	84	100	--

11532615 EAST FORK MILL CREEK AT BRIDGE NEAR CRESCENT CITY--CONTINUED

JAN., 1975

06...	18	33	52	70	94	100	--	--
07...	9	19	33	53	74	92	100	--
08...	19	48	71	84	94	98	100	--
MAR.								
17...	29	50	67	82	90	97	100	--
18...	6	9	21	39	57	76	100	--
18...	9	23	42	61	76	90	100	--

11532620 MILL CREEK NEAR CRESCENT CITY--CONTINUED

JAN., 1974

16...	10	17	25	37	69	100	--	--
FEB.								
19...	29	49	65	75	89	100	--	--
APR.								
02...	25	51	67	78	98	100	--	--
JAN., 1975								
07...	25	43	58	72	83	93	100	--
MAR.								
17...	10	12	16	25	44	68	93	100
18...	31	42	54	64	71	89	100	--
19...	5	9	15	22	32	55	70	100

11532626 MILL CREEK AT BRIDGE NEAR CRESCENT CITY--CONTINUED

JAN., 1975

06...	23	53	73	82	100	--	--	--
07...	42	72	82	84	88	89	100	--
08...	3	5	8	18	41	53	79	100
MAR.								
17...	10	18	25	30	40	53	77	100
18...	13	20	28	40	54	71	82	100

Intragravel-Streambed Conditions

The condition of the intragravel environment is important for organisms that use this habitat for survival and development. Extreme intragravel water temperatures can be lethal to these organisms. Siltation of the intragravel environment impedes the flow of intragravel water that provides organisms (especially developing salmonid embryos) with oxygen and removes metabolic wastes (carbon dioxide and ammonia). Siltation also can be a physical barrier and prevent the emergence of salmonid alevins and other aquatic organisms into the surface-water environment.

Polyvinyl chloride (PVC) ground-water standpipes were placed in the streambed at each sampling station (fig. 2) to depths that ranged from 150 to 200 mm. A description of the ground-water standpipes and the method used to install each standpipe are given in Woods (1975). Dissolved-oxygen concentrations and temperatures of surface and intragravel waters (tables 10 and 11) were determined with a dissolved-oxygen meter with a polarographic probe. The meter was standardized before and after each sampling trip with the azide modification of the Winkler method (American Public Health Association and others, 1971, p. 447; Brown and others, 1970, p. 126). The thermistor probe of the dissolved-oxygen meter was calibrated with a laboratory mercury-filled thermometer accurate to $\pm 0.2^{\circ}\text{C}$.

Stream discharges (table 10) were determined at each tributary sampling station of Redwood Creek, except for Little Lost Man Creek during the winter, by the current-meter method (Buchanan and Somers, 1969).

Particle-size distribution of streambed materials (table 12) was determined at each sampling station³ by collecting a core sample with a McNeil stream-bottom sampler (McNeil and Ahnell, 1964). The size of the stream-bottom sampler excluded streambed materials greater than 6 in (152 mm) in diameter. After collection, each core sample was washed through a set of sieves to separate the streambed materials into classes with the following size limits (mm): 26.67; 13.50; 6.73; 3.33; 1.70; 0.833; 0.104; and <0.104. The finer streambed materials that passed through the 0.104-mm sieve were settled for 10 min in a settling cone to allow about 90 percent of the suspended solids to settle (McNeil and Ahnell, 1964). The wet volumetric displacement method described in Woods (1975) was used to determine the percentage distribution of the size classes of streambed materials collected at each sampling station.

³Winter sampling was not made at Little Lost Man Creek because of large stream discharges.

TABLE 10.--Weekly measurements of temperature and dissolved-oxygen concentration of surface and intragravel water, June-November 1974

Location of stations shown in figure 2. Data for Panther Creek, Unnamed tributary to Lost Man Creek, and Little Lost Man Creek are from Woods (1975). Data for three Redwood Creek stations are from P. F. Woods, written commun., 1975]

Date	Time	Surface water			Intragravel water					
		Temperature (°C)	Dissolved oxygen (mg/l)	Instantaneous discharge (ft ³ /s)	Temperature (°C)			Dissolved oxygen (mg/l)		
<u>11481500 Redwood Creek near Blue Lake</u>										
June	26	0930	13.5	10.1	13.5	13.0	13.0	10.0	9.8	9.9
July	7	1500	25.5	9.2	26.0	25.5	25.5	8.6	8.5	8.5
July	11	0930	14.5	10.4	14.5	14.5	14.5	10.1	9.9	10.0
July	17	1500	23.5	9.2	23.5	23.5	23.5	8.7	8.5	8.6
July	26	1000	22.0	9.9	22.0	21.5	22.0	9.2	8.8	8.9
August	4	0930	21.5	9.3	21.5	21.0	21.5	9.1	8.5	8.9
August	16	1530	26.0	8.3	26.0	26.0	26.0	7.9	7.5	7.8
August	21	1300	23.5	8.9	23.5	23.0	23.5	8.7	8.4	8.5
August	31	0915	18.0	9.0	18.0	18.0	18.0	8.8	8.4	8.6
September	7	1030	19.5	9.0	20.0	19.0	19.5	9.1	8.7	9.0
September	14	1545	23.5	8.7	24.0	23.0	23.5	8.4	8.1	8.3
September	22	1230	19.5	9.9	19.5	19.0	19.5	9.9	9.5	9.6
September	29	1145	16.0	10.1	16.5	16.0	16.5	10.2	9.9	10.0
October	5	1215	14.0	10.6	14.0	14.0	14.0	10.8	10.5	10.6
October	12	1130	14.0	10.2	14.0	13.5	13.5	10.4	10.3	10.3
October	19	1415	15.0	10.4	15.0	15.0	15.0	10.3	10.0	10.0
October	26	1030	9.0	11.4	9.5	9.0	9.0	11.4	11.1	11.2
November	2	1245	9.5	11.4	9.5	9.0	9.5	11.3	11.2	11.3
November	8	1515	10.5	10.9	11.0	11.0	11.0	10.8	10.6	10.7
<u>11482120 Redwood Creek above Panther Creek, near Orick</u>										
June	26	1500	22.5	8.4	22.5	22.0	22.5	8.3	7.9	8.1
July	3	1230	21.5	9.0	21.5	21.0	21.0	8.8	8.6	8.7
July	11	1200	19.0	9.8	19.0	18.5	19.0	9.3	9.1	9.2
July	17	1230	22.0	9.1	22.0	22.0	22.0	8.8	8.4	8.6
July	26	1230	25.5	8.7	25.0	25.0	25.0	8.4	6.8	7.5
August	4	1200	25.0	8.8	24.5	24.0	24.0	8.0	7.6	7.8
August	16	1300	22.5	9.2	23.0	22.0	22.5	8.8	8.2	8.6
August	23	1245	23.5	9.2	23.5	23.0	23.5	8.9	7.6	8.5
August	31	1145	21.5	9.6	21.0	20.0	21.0	8.9	8.1	8.7
September	7	1300	23.5	9.4	23.0	22.5	23.0	9.0	8.4	8.8
September	14	1315	21.0	9.7	20.5	20.0	20.5	9.6	9.0	9.3
September	22	0845	15.5	9.7	15.5	15.5	15.5	9.3	8.0	8.8
September	28	0945	14.5	10.3	14.0	14.0	14.0	10.2	9.8	10.0
October	5	1430	17.0	10.3	17.0	17.0	17.0	10.4	10.2	10.3
October	12	1530	17.0	10.1	17.0	17.0	17.0	10.1	9.6	9.8
October	19	0900	11.0	10.4	11.0	11.0	11.0	10.2	9.6	10.0
October	26	1530	13.0	10.8	13.0	13.0	13.0	10.7	10.2	10.5
November	2	1015	9.0	11.6	9.0	8.5	9.0	11.4	10.5	11.1
November	8	1015	9.5	11.5	9.5	9.0	9.5	11.4	11.0	11.3
<u>Panther Creek</u>										
June	26	1315	13.5	10.4	3.15	13.0	12.5	12.5	10.0	4.2
July	3	0945	12.0	10.6	2.58	12.5	12.0	12.0	10.1	1.0
July	11	1300	14.0	10.3	2.33	14.0	13.0	13.5	9.6	2.0
July	17	1030	13.5	10.2	2.09	13.5	13.0	13.5	9.9	2.4
July	26	1400	19.0	9.4	1.41	19.0	15.0	17.5	9.0	2.2
August	4	1300	19.0	9.3	.90	16.5	15.5	17.0	9.2	2.4
August	16	1045	14.5	10.0	.65	14.5	14.0	14.0	10.0	2.6
August	23	1045	15.0	10.5	.68	15.0	15.0	15.0	9.8	2.8
August	31	1315	17.0	10.4	.67	17.0	15.5	16.0	10.4	3.2
September	7	1430	18.0	10.2	.44	18.0	16.0	17.5	10.0	2.6
September	14	1145	15.0	11.2	.40	14.5	13.5	13.5	11.0	3.0
September	22	0945	12.0	11.2	.36	13.5	12.0	12.5	11.0	3.9
September	28	1115	11.5	11.4	.28	13.0	11.0	11.5	11.2	4.0
October	5	1600	13.0	10.9	.25	14.0	13.0	13.5	10.7	5.0
October	12	1430	14.0	11.5	.24	13.0	12.0	12.5	11.0	4.4
October	19	1015	9.0	11.3	.25	10.5	9.0	9.5	11.1	4.3
October	26	1415	10.5	12.3	.36	11.0	10.0	10.5	11.8	5.0
November	8	1215	8.5	11.8	1.58	10.0	8.5	9.5	11.7	4.2
November	15	1315	9.5	11.8	.81	10.0	9.5	9.5	11.7	4.2
November	22	0930	8.0	11.6	2.68	9.5	8.0	8.0	11.4	2.4

TABLE 10.--Weekly measurements of temperature and dissolved-oxygen concentration of surface and intragravel water, June-November 1974--Continued

Date	Time	Surface water			Intragravel water			Number of samples			
		Temperature (°C)	Dissolved oxygen (mg/l)	Instantaneous discharge (ft³/s)	Temperature (°C)	Maximum	Minimum	Mean	Maximum	Minimum	Mean
<u>Redwood Creek above Hayes Creek</u>											
June 27	1530	21.0	8.7		14.0	12.0	13.0	6.0	3.2	5.1	4
July 5	1230	18.0	9.1		13.5	12.5	13.0	6.0	4.5	5.5	4
July 14	1330	19.5	9.0		15.0	13.5	14.0	5.9	4.5	5.4	5
July 21	1000	16.0	9.6		14.0	13.5	14.0	5.5	5.0	5.2	5
July 27	1600	23.0	8.5		15.5	14.0	14.5	5.6	5.0	5.2	4
August 3	0945	17.0	8.8		15.0	14.0	14.5	5.1	4.9	5.0	4
August 15	1000	16.0	9.0		16.0	15.0	15.5	5.3	4.5	5.0	4
August 24	1230	19.0	9.3		17.0	15.5	16.0	4.8	4.2	4.5	4
August 29	1200	16.5	8.4		16.5	16.0	16.5	4.6	4.2	4.3	3
September 6	1600	21.0	8.6		17.5	16.5	17.0	4.6	4.0	4.4	4
September 13	1045	16.0	8.3		17.0	16.5	16.5	4.2	3.8	4.1	4
September 21	1245	16.0	9.1		17.0	17.0	17.0	4.3	4.0	4.1	4
September 27	1045	13.5	10.0		17.0	17.0	17.0	4.7	4.2	4.5	4
October 4	1430	17.0	10.2		17.5	17.0	17.5	5.3	4.5	4.8	4
October 11	1300	16.0	10.1		17.5	17.0	17.5	4.9	4.4	4.6	4
October 18	1330	16.0	9.8		17.0	17.0	17.0	5.0	4.4	4.6	4
October 25	1115	11.5	10.1		16.5	15.5	16.0	5.3	4.5	5.0	4
November 1	0945	11.0	10.9		15.5	15.0	15.5	6.5	5.6	5.9	4
November 9	0900	10.5	11.4		16.5	14.5	15.5	6.8	6.0	6.5	3
<u>Unnamed tributary to Lost Man Creek</u>											
June 27	1330	16.0	9.8	2.24	15.0	14.0	14.5	9.2	4.2	7.7	5
July 5	1000	14.0	10.4	2.32	13.0	13.0	13.0	9.2	2.7	7.4	5
July 14	1030	13.0	10.4	1.93	13.0	12.5	13.0	9.1	3.1	6.8	5
July 21	1500	16.5	9.7	2.21	15.0	15.0	15.0	9.0	2.3	6.6	5
July 27	1330	18.0	9.5	2.14	16.0	16.0	16.0	8.6	2.4	6.5	5
August 3	1145	16.5	9.5	1.96	16.0	15.0	15.5	8.6	1.7	6.2	5
August 15	1500	17.5	9.4	1.86	16.0	15.5	16.0	8.7	2.3	6.5	5
August 24	1045	14.5	10.3	2.03	14.0	14.0	14.0	8.3	2.3	6.2	5
August 29	1500	14.0	10.0	1.93	14.0	14.0	14.0	8.6	2.0	5.8	5
September 6	1145	15.0	10.2	1.73	14.0	13.0	13.5	8.5	2.4	6.3	5
September 13	1445	15.0	10.0	1.62	14.0	14.0	14.0	8.6	2.0	5.8	5
September 21	1100	12.0	10.6	1.49	12.5	12.0	12.5	9.1	2.4	6.6	5
September 27	1345	14.5	10.1	1.38	13.0	12.0	12.5	9.3	2.8	7.0	5
October 4	1045	10.0	11.4	1.49	10.0	9.0	9.5	10.7	3.2	7.9	5
October 11	1445	14.0	10.2	1.35	12.0	11.5	12.0	9.6	3.4	7.1	5
October 18	1130	11.0	10.6	1.25	10.5	10.0	10.5	9.1	3.1	6.7	5
October 25	1430	12.0	10.7	1.44	10.5	10.0	10.5	9.7	3.3	7.2	5
November 9	1300	11.0	11.3	2.00	11.0	10.5	10.5	10.2	2.2	6.9	5
November 15	0930	10.0	10.9	1.53	10.0	10.0	10.0	9.0	3.6	6.7	5
November 22	1430	10.0	11.2	3.26	10.0	9.5	9.5	4.1	1.8	3.2	5
<u>Little Lost Man Creek (station no. 1)</u>											
June 27	1030	10.0	10.2	.12	10.0	10.0	10.0	10.0	9.5	9.8	5
July 5	1500	12.0	10.0	.13	12.0	12.0	12.0	9.9	9.4	9.6	5
July 13	1300	11.0	10.2	.14	11.0	10.5	10.5	10.1	9.5	9.8	5
July 21	1230	12.0	10.1	-	12.0	12.0	12.0	9.9	9.2	9.5	5
July 27	1030	13.0	9.4	.08	13.5	13.0	13.0	9.5	8.7	9.1	5
August 3	1400	14.0	9.4	.06	14.0	14.0	14.0	9.4	8.4	9.0	5
August 15	1230	12.0	9.4	.04	12.0	12.0	12.0	9.8	9.0	9.4	5
August 24	1500	12.0	9.6	.03	13.0	12.5	12.5	9.4	8.4	9.0	5
August 29	1015	12.0	9.4	.03	12.0	12.0	12.0	9.3	8.8	9.0	5
September 6	1345	12.5	9.4	.03	13.0	12.5	12.5	9.4	8.8	9.2	5
September 13	1245	12.0	9.4	.02	12.0	12.0	12.0	9.4	8.5	9.1	5
September 21	1445	11.5	9.8	<.02	11.5	11.5	11.5	9.6	9.3	9.4	5
September 27	0930	10.5	10.0	.02	11.0	10.5	10.5	10.0	9.2	9.7	5
October 4	1245	10.0	10.2	<.02	10.0	10.0	10.0	10.4	9.9	10.2	5
October 11	1030	10.0	9.8	<.02	10.0	9.5	10.0	10.2	9.8	10.0	5
October 18	1445	11.5	9.1	<.02	11.5	11.5	11.5	9.2	9.1	9.1	3
October 25	1230	9.5	9.6	<.02	9.5	9.5	9.5	9.8	9.6	9.6	3
November 9	1045	9.0	11.1	.05	10.5	9.0	9.5	10.9	10.4	10.7	5
November 15	1130	9.0	10.3	.04	9.0	9.0	9.0	10.3	10.0	10.2	5
November 22	1200	7.0	11.4	.037	7.5	7.0	7.0	11.2	11.2	11.2	5

TABLE 3
Concentration of surface and intragravel water at four stations
on Little Lost Man Creek, December 1974-March 1975

[See figure 2 for location of sampling stations]

Date	Time	Surface water		Intragravel water			Number of samples			
		Temperature (°C)	Dissolved oxygen (mg/l)	Temperature (°C)	Maximum	Minimum		Dissolved oxygen (mg/l)	Maximum	Minimum
<u>Station No. 1</u>										
December 18, 1974	1330	9.0	11.4	-	-	9.0	11.3	11.2	11.2	2
January 3, 1975	1115	7.0	11.6	-	-	7.0	11.6	11.0	11.3	2
January 18, 1975	1330	8.0	11.4	-	-	8.0	11.4	11.0	11.3	3
February 7, 1975	1430	7.5	11.7	-	-	7.5	11.6	10.9	11.4	3
March 1, 1975	0900	8.0	11.2	-	-	8.0	11.2	11.2	11.2	3
<u>Station No. 2</u>										
December 18, 1974	1330	8.5	11.45	-	-	8.5	11.3	9.2	10.5	3
January 3, 1975	1215	6.5	11.7	7.0	6.5	6.5	11.5	8.4	10.4	3
January 18, 1975	1400	8.0	11.6	-	-	8.0	11.4	7.6	10.0	3
February 7, 1975	1330	7.0	11.6	8.0	7.5	7.5	11.2	10.6	11.0	3
March 1, 1975	0800	8.0	11.1	-	-	8.0	10.6	8.7	9.9	3
<u>Station No. 3</u>										
December 18, 1974	1100	8.0	11.7	-	-	8.0	11.6	11.2	11.4	3
January 3, 1975	1400	6.5	12.2	-	-	6.5	12.0	12.0	12.0	3
January 18, 1975	1130	8.0	11.8	-	-	8.0	11.8	11.6	11.6	3
February 7, 1975	1100	8.0	11.8	-	-	8.0	11.4	11.4	11.4	3
March 1, 1975	1300	9.0	11.6	-	-	9.0	11.4	11.1	11.2	3
<u>Station No. 4</u>										
December 18, 1974	1200	8.5	11.9	-	-	8.5	11.5	11.1	11.4	3
January 3, 1975	1500	6.5	12.4	-	-	6.5	12.0	11.8	12.0	3
January 18, 1975	1030	7.0	12.2	-	-	7.5	11.6	11.3	11.5	3
February 7, 1975	1200	8.5	11.7	-	-	8.0	11.4	11.0	11.2	3
March 1, 1975	1430	9.0	11.8	-	-	9.0	11.2	10.8	11.0	2

TABLE 12.--Particle-size distribution of streambed materials

[See figure 2 for location of sampling stations. The size of the streambed sampler excluded materials greater than 6 in (152 mm). Data listed for Panther Creek, Unnamed tributary to Lost Man Creek, and Little Lost Man Creek are from Woods (1975). Data listed for three Redwood Creek stations are from P. F. Woods, written commun., 1975]

Particle size (mm)	Percentage distribution			Percentage distribution		
	Maximum	Minimum	Mean	Maximum	Minimum	Mean
<u>11481500 Redwood Creek near Blue Lake</u>			<u>11482120 Redwood Creek above Panther Creek</u>			
August 21, 1974 5 samples			August 23, 1974 5 samples			
>26.67	32.1	14.1	22.6	18.7	6.9	13.0
13.50-26.66	15.9	10.4	12.8	19.1	13.0	15.5
6.73-13.49	14.7	9.8	12.2	19.2	14.0	16.5
3.33-6.72	14.0	8.6	10.8	15.9	11.2	12.9
1.70-3.32	14.0	9.8	11.9	13.4	11.0	11.9
0.833-1.69	9.8	6.8	8.0	15.2	11.0	13.2
0.104-0.832	14.3	9.5	11.8	12.1	7.0	9.4
<0.104	11.9	5.3	10.0	9.4	5.4	7.6
<3.33	44.8	39.0	41.7	45.0	40.8	42.1
<0.833	24.8	19.5	21.8	18.9	14.8	17.0
<u>Panther Creek</u>						
June 7 and July 10, 1974 10 samples			December 10, 1974 10 samples			
>26.67	41.3	11.4	24.3	29.5	8.1	17.6
13.50-26.66	16.2	8.1	11.7	17.0	3.4	8.4
6.73-13.49	14.4	4.3	10.3	13.3	6.2	9.0
3.33-6.72	13.4	6.4	9.5	16.2	7.8	10.3
1.70-3.32	14.5	7.8	10.8	18.4	5.7	12.1
0.833-1.69	14.6	3.7	9.8	16.2	3.1	12.7
0.104-0.832	15.1	7.1	11.7	18.5	10.5	14.0
<0.104	16.2	5.6	11.9	19.4	11.1	15.9
<3.33	54.8	32.7	44.3	65.3	35.9	54.7
<0.833	31.3	18.9	23.6	34.4	21.8	29.8

TABLE 12.--Particle-size distribution of streambed materials--Continued

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	Particle size (mm)	Percentage distribution			Percentage distribution		
		Maximum	Minimum	Mean	Maximum	Minimum	Mean
Redwood Creek above Hayes Creek							
August 20, 1974 5 samples							
	>26.67	7.6	0.0	4.4			
	13.50-26.66	20.9	6.9	14.8			
	6.73-13.49	25.6	14.3	20.6			
	3.33-6.72	28.6	14.5	18.7			
	1.70-3.32	20.2	9.6	13.6			
	0.833-1.69	17.2	2.1	9.2			
	0.404-0.832	16.0	12.0	14.3			
	<0.104	8.1	2.2	4.3			
13.0							
15.5							
16.5							
12.9							
11.9							
13.2							
9.4							
7.6							
	June 6, 1974 5 samples			December 7, 1974 5 samples			
	>26.67	15.3	10.1	13.2	27.0	3.2	15.5
	13.50-26.66	17.6	11.3	14.8	13.0	12.6	12.8
	6.73-13.49	15.5	12.6	14.4	13.9	11.7	12.9
	3.33-6.72	13.8	9.3	12.2	12.0	9.5	10.7
	1.70-3.32	15.5	9.3	12.1	12.6	7.9	9.8
	0.833-1.69	12.4	6.4	8.8	15.6	10.5	12.1
	0.404-0.832	21.2	13.8	17.3	24.9	14.9	20.4
	<0.104	10.7	4.9	7.4	8.0	4.1	5.8
17.6							
8.4	<3.33	48.5	42.4	45.5	58.6	38.2	48.1
9.0	<0.833	26.1	23.3	24.7	31.1	19.8	26.2
10.3							
12.1							
12.7							
14.0							
15.9							
	Little Lost Man Creek (station no. 1)						
	June 7 and July 14, 1974			December 11, 1974 10 samples			
	10 samples						
	>26.67	58.6	22.1	39.2	56.7	12.0	39.6
	13.50-26.66	20.7	8.3	12.4	18.5	6.4	11.2
	6.73-13.49	18.2	8.3	11.5	16.0	6.6	10.2
	3.33-6.72	12.4	6.7	9.0	16.0	5.5	8.9
	1.70-3.32	13.7	6.1	8.8	9.4	4.3	6.8
	0.833-1.69	6.8	2.3	4.0	8.6	3.8	5.8
	0.404-0.832	7.1	1.6	4.2	11.7	2.3	6.9
	<0.104	17.4	4.5	10.8	19.5	6.5	10.6
	<3.33	43.6	15.3	27.9	45.7	21.4	30.1
	<0.833	21.1	7.0	15.1	30.5	10.1	17.5

Chemical Data

pH

The pH of water is the negative logarithm of the hydrogen-ion activity. Solutions with a pH less than 7 are termed acidic, and solutions with a pH greater than 7 are termed basic. Solutions with a pH of 7 are neutral. The presence and concentration of many dissolved chemical constituents found in water are, in part, influenced by the hydrogen-ion activity of water. For example, at pH values greater than 8.3 carbon dioxide is, for practical purposes, absent; at pH values less than 8.3, the carbonate ion is absent. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms are also influenced, in part, by the hydrogen-ion activity of water.

The pH (tables 13 and 14) was measured onsite using a portable meter with a combination glass electrode and following the techniques outlined by Brown and others (1970, p. 129). Prior to use, pH meters were calibrated using at least two buffer solutions; the meters were calibrated several times during extended periods of operation.

Total Alkalinity

Total alkalinity is the amount of acid that a solution can absorb for a given change in pH. It is a measure of the buffering capacity of the water. In this report, total alkalinity is reported as an equivalent concentration of calcium carbonate.

Total alkalinity was measured in the field by titrating a measured volume of water with a 0.01639N solution of sulfuric acid to a pH of 4.5. A portable pH meter was used to determine the titration endpoint. Standardized procedures and calculations (American Public Health Association and others, 1971, p. 370; Brown and others, 1970, p. 41) were used in determining total alkalinity values (tables 13 and 14).

Specific Conductance

Specific conductance is a measure of the ability of a solution to conduct an electrical current and is expressed in micromhos per centimeter at 25°C. Specific conductance is used to estimate the concentration of major dissolved solids in water. The types and individual concentrations of the anions and cations cannot be determined by the measurement. The significance of major dissolved solids in water is discussed in the section "Dissolved Solids."

Specific conductance was measured in the field and in the laboratory using a portable conductivity meter. Water samples for field determination of specific conductance were collected at the estimated centroid of flow at each sampling point; samples for laboratory determinations were taken from water collected for suspended-sediment analyses. Standardized techniques in Brown and others (1970, p. 148) were followed in determining the specific conductance values listed in tables 13 and 14.

Dissolved Oxygen

The dissolved-oxygen concentration in water is the quantity of free oxygen in solution. The corrosive action of water on metals and the solubility of many chemical elements and compounds are influenced, in part, by the dissolved-oxygen concentration. In addition, dissolved oxygen is essential for maintaining the life processes of aquatic organisms and is used as an indicator of biological productivity. Photosynthesis is an oxygen-producing process; respiration is an oxygen-consuming process.

Dissolved-oxygen concentrations were measured in the field using the azide modification of the Winkler method. Water samples were collected in glass-stoppered bottles. After adding the appropriate reagents, the dissolved-oxygen concentration of the sample was determined by titrating with 0.025N phenylarsine oxide to a clear endpoint, using starch as an endpoint indicator. Standardized procedures (American Public Health Association and others, 1971, p. 477; Brown and others, 1970, p. 126) were followed in all dissolved-oxygen concentration determinations (table 13).

TABLE 13.--Onsite determinations of water quality

[See figures 2, 3, and 4 for location of sampling stations. A, instantaneous discharge measured with current meter or flume. C, preceding time of sample collection indicates that sample was collected automatically with a single-stage sediment sampler. G, preceding data of sample collection indicates auxiliary data collected prior to establishment of station for this study, and thus precedes April 11, 1974, the beginning date of data released in this report. A submersible multiparameter water-quality monitor was used to determine specific conductance, pH, temperature, and dissolved-oxygen concentration profiles of the Redwood Creek estuary during the spring 1975 survey. During other estuary surveys, a horizontal Van Dorn type sampler was used to collect water samples at various depths for analysis]

	INSTAN-	ALKA-	SPE-	
	TANEOUS	LINITY	CIFIC	
	DIS-	AS.	CON-	
	CHARGE	CACO ₃	DUCT-	
	(FT ³ /S)	(MG/L)	(MICRO-	
	DATE		MHS)	
			(UNITS)	
			PH	TEMPER-
				ATURE
				(DEG C)
				DIS-
				SOLVED
				OXYGEN
				(MG/L)
211481500 REDWOOD CREEK NEAR BLUE LAKE				
MAY, 1974				
08...	1135	99	35	91
13...	1200	A3	--	92
				--
JULY				
18...	0940	15	--	161
				--
SEP.				
18...	1200	3.6	84	250
				8.3
NOV.				
21...	0910	16	61	225
				6.8
MAY, 1975				
08...	1350	--	30	79
				7.7
				17.0
				9.3
JULY				
30...	1150	--	--	164
30...	1200	--	62	--
30...	1235	15	--	159
30...	1300	--	--	165
30...	1400	--	--	165
30...	1500	--	--	163
30...	1600	--	57	162
30...	1700	--	--	159
30...	1800	--	51	159
30...	1900	--	--	161
30...	2000	--	60	165
30...	2100	--	--	167
30...	2200	--	59	162
30...	2300	--	--	167
30...	2400	--	60	163
31...	0030	15	--	160
31...	0100	--	--	162
31...	0200	--	62	162
31...	0300	--	--	167
31...	0400	--	60	165
31...	0500	--	--	165
31...	0600	--	62	169
31...	0700	--	--	170
31...	0800	--	60	166
31...	0900	--	--	164
31...	1000	--	62	165
31...	1100	--	--	162
31...	1200	14	--	157
				--
SEP.				
14...	1215	--	70	191
				7.9
				20.0
				9.4

TABLE 13.--Onsite determinations of water quality--Continued

			INSTANTANEOUS TIME	ALKALINITY DISCHARGE (FT ³ /S)	SPECIFIC CONDUCTANCE CACO ₃ (MG/L)	DUCT. ANCFC (MICRO- MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)
11482020 REDWOOD CREEK AT REDWOOD VALLEY BRIDGE, NEAR BLUE LAKE									
MAY	1 1974								
08...	1330		--	38	110	7.4	17.5	8.6	
JULY	18...	1245	--	--	178	--	25.0	--	
SEP.	18...	1330	--	94	263	8.7	25.0	9.0	
NOV.	21...	1045	23	--	262	--	11.0	--	
21...	1055		--	64	240	7.2	11.0	10.7	
DEC.	11...	1230		--	--	111	--	--	--
FER., 1975									
05...	1610	1350		--	78	--	5.5	--	
05...	1710		--	26	56	7.2	5.5	12.2	
14...	1120	1850		--	63	--	7.0	--	
14...	1230		--	12	69	7.7	7.0	11.6	
28...	1615	475		--	68	--	--	--	
MAR.									
03...	1315	780		--	67	--	8.5	--	
07...	1500	560		--	68	--	9.5	--	
19...	1410	5500		--	67	--	--	--	
20...	1620	2700		--	76	--	--	--	
22...	1315	2350		--	46	--	6.5	--	
APR.									
10...	1515	1150		--	78	--	10.0	--	
MAY									
27...	1415		--	34	87	7.7	19.5	9.1	
JULY									
30...	1200		--	72	181	8.0	21.0	8.8	
30...	1245	98	--	179	--	--	--	--	
30...	1300		--	--	191	7.8	21.0	8.2	
30...	1500		--	72	185	7.9	24.0	8.4	
30...	1600		--	--	186	8.0	24.5	8.1	
30...	1700		--	72	184	8.2	24.0	8.0	
30...	1800		--	--	186	8.3	23.0	8.3	
30...	1900		--	72	183	8.3	22.0	7.7	
30...	2000		--	--	184	8.1	21.0	7.7	
30...	2100		--	71	184	8.2	20.0	7.2	
30...	2205		--	--	179	8.0	21.0	7.8	
30...	2300		--	71	177	8.1	20.5	8.1	
30...	2400		--	--	180	8.0	20.0	8.2	
31...	0030	94	--	--	179	--	20.0	--	
31...	0100		--	72	178	8.1	20.0	8.1	
31...	0200		--	72	182	8.0	18.0	8.0	
31...	0300		--	--	181	8.0	17.5	8.2	
31...	0400		--	72	180	8.1	17.5	8.2	
31...	0500		--	--	182	8.0	17.0	8.1	
31...	0600		--	70	185	8.1	16.0	8.4	
31...	0700		--	--	184	8.1	16.0	8.5	
31...	0800		--	--	184	8.0	16.0	8.8	
31...	0900		--	69	186	8.1	17.0	8.6	
31...	1000		--	--	180	8.1	20.0	9.0	
31...	1100		--	70	188	8.1	19.0	8.6	
31...	1200		--	69	184	8.2	21.5	8.4	
31...	1215	91	--	--	179	--	21.5	--	
SEP.									
14...	1345		--	80	221	7.8	23.0	8.7	

TABLE 13.--Onsite determinations of water quality--Continued

			INSTANTANEOUS	ALKALINITY	DUCTANCE	PH	TEMPERATURE	SOLVED OXYGEN
			TIME	DISCHARGE (FT ³ /S)	AS CACO ₃ (MG/L)	(MICRO MMOS)	(DEG C)	(MG/L)
			DATE			(UNITS)		
11482110 LACKS CREEK NEAR ORICK								
NOV., 1974								
22...	0945	20			140	--	7.0	--
JAN., 1975								
16...	1110	62	ATM	--	69	--	6.0	--
FEB.								
05...	0200	573			56	--	7.0	--
05...	1030	240			57	--	7.0	--
05...	1350	255			58	--	6.0	--
05...	1425	280			54	--	6.0	--
05...	1500	322			56	--	7.0	--
06...	1800	268			56	--	8.0	--
06...	2030	273			55	--	8.0	--
07...	1000	319			54	--	8.0	--
08...	0945	280			55	--	8.0	--
08...	1700	280			55	--	8.0	--
09...	1400	439			49	--	7.0	--
09...	2400	582			49	--	7.0	--
12...	1200	1730			43	--	9.0	--
12...	1600	1700			45	--	9.0	--
12...	1930	1030			48	--	8.5	--
13...	1200	480			45	--	9.0	--
13...	1500	900			46	--	8.0	--
13...	1700	818			46	--	--	--
14...	1200	873			50	--	7.5	--
19...	1210	1820			38	--	9.0	--
MAR.								
12...	1530				65	--	10.0	--
20...	1430	490			49	--	--	--
APR.								
01...	1115	A73			64	--	7.5	--
01...	1145	77			63	--	7.5	--
11482120 REDWOOD CREEK ABOVE PANTHER CREEK, NEAR ORICK								
MAY, 1974								
09...	1025			44	115	7.4	13.5	10.3
JULY								
18...	1600	31		--	144	--	25.0	--
SEP.								
19...	1000			91	260	8.4	17.0	9.6
NOV.								
21...	1615	46		65	253	6.8	10.0	10.1
22...	1015	--		54	--	6.7	8.0	11.3
22...	1025	152		--	224	--	8.0	--
DEC.								
10...	1600	194		--	167	--	--	--
FEB., 1975								
05...	1550	1740		--	83	--	7.5	--
06...	1630	--		28	61	7.6	7.5	10.9
09...	1115	3400		--	69	--	8.0	--
09...	1200	--		26	67	7.8	8.0	11.4
13...	1645	4650		--	64	--	10.0	--
13...	1730	--		13	67	6.5	8.0	11.1
24...	1235	1530		--	68	--	9.5	--
MAR.								
07...	1100	1600		--	70	--	9.0	--
APR.								
10...	1315	1050		--	78	--	9.0	--
14...	1235	970		--	81	--	8.0	--
MAY								
28...	1100	--		42	104	7.6	14.5	9.9

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (FT ³ /S)	ALKA- LINITY AS CACO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOES)	PH	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)
11482120 REDWOOD CREEK ABOVE PANTHER CREEK, NEAR ORICK--CONTINUED							
JULY, 1975							
30...	1200	66	75	197	8.0	21.0	8.9
30...	1300	--	--	203	8.0	21.5	8.6
30...	1400	--	78	198	8.0	22.0	8.0
30...	1500	--	--	194	7.8	22.5	8.2
30...	1600	--	76	196	7.9	23.0	8.4
30...	1700	--	--	194	8.0	23.0	--
30...	1800	--	76	193	7.9	23.0	8.3
30...	1900	--	--	198	8.1	22.0	8.2
30...	2000	--	76	197	8.0	21.0	8.1
30...	2100	--	--	200	7.9	20.0	8.1
30...	2200	--	76	206	7.9	20.0	7.9
30...	2300	--	--	200	7.8	19.5	8.0
30...	2400	64	76	197	7.6	19.0	8.3
31...	0100	--	--	201	7.5	18.0	8.2
31...	0200	--	76	204	7.5	18.5	8.2
31...	0300	--	--	207	7.7	18.0	8.3
31...	0400	--	76	206	7.7	18.0	8.3
31...	0500	--	--	201	7.7	18.0	8.4
31...	0600	--	76	202	7.8	17.0	8.2
31...	0700	--	--	205	7.7	17.0	8.6
31...	0800	--	76	205	7.8	17.0	8.9
31...	0900	--	--	202	7.9	17.5	8.9
31...	1000	--	78	203	7.9	19.0	8.9
31...	1100	--	--	202	7.8	20.0	8.9
31...	1200	64	75	198	7.8	21.0	8.8
SEP.							
15...	1100	--	83	226	7.5	19.0	9.3
11482140 HIGH SLOPE SCHIST CREEK NEAR ORICK							
MAY 1 1974							
26...	1200	--	31	60	7.1	10.0	10.5
JULY							
23...	1145	.20	29	80	7.5	12.5	10.2
SEP.							
22...	1145	.10	37	93	7.7	12.0	10.1
JAN. 1975							
15...	1515	4.0	16	48	7.2	8.5	11.5
FEB.							
18...	1300	6.3	--	46	--	8.0	--
19...	1200	20	--	31	--	--	--
MAR.							
07...	1145	3.4	--	47	--	9.0	--
21...	1305	30	--	33	--	7.0	--
21...	1335	27	--	33	--	7.0	--
21...	1350	29	--	33	--	7.0	--
MAY							
20...	1230	1.2	--	48	--	8.5	--
20...	1330	--	20	--	7.3	8.5	11.2
30...	1050	--	24	53	7.5	11.5	10.5
SEP.							
18...	1145	--	33	86	6.8	12.0	9.9

TABLE 13.--Onsite determinations of water quality--Continued

DATE	INSTANTANEOUS TIME	ALKALINITY CHARGE (CFT ³ /S)	DIA- SAS (MG/L)	DUCTANCE CACO ₃ (MG/L)	SPE- CIFIC CON- DUCTANCE (MHOS)	PH	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)
11482160 COPPER CREEK NEAR ORICK								
APR., 1974								
16...	1310	4.6	--	67	--	10.5	--	
16...	1400	4.6	25	69	7.4	10.5	10.4	
MAY								
09...	1230	--	41	99	7.4	15.0	9.8	
SEP.								
19...	1130	--	96	235	8.2	17.0	9.5	
DEC.								
14...	C1200	33	--	89	--	--	--	
JAN., 1975								
05...	C1800	134	--	40	--	--	--	
14...	1100	11	--	54	--	6.5	--	
FEB.								
11...	1350	37	--	46	--	--	--	
18...	1445	20	--	50	--	--	--	
19...	C1200	135	--	44	--	--	--	
24...	1515	E10	--	51	--	10.0	--	
MAR.								
13...	1330	12	705	57	--	8.0	--	
13...	1345	--	118	--	6.3	8.0	11.5	
20...	1320	54	705	59	--	7.5	--	
APR.								
10...	1200	7.4	705	58	--	--	--	
MAY								
06...	1100	9.3	801	67	--	10.5	--	
06...	1150	--	22	--	6.8	11.0	10.9	
28...	1300	--	47	119	7.7	19.0	9.0	
SEP.								
15...	1215	--	111	258	7.7	19.5	9.1	
11482190 SLIDE CREEK NEAR ORICK								
APR., 1974								
23...	1300	2.1	--	66	--	9.0	--	
23...	1400	--	30	--	7.5	9.0	11.4	
MAY								
09...	1535	--	40	95	7.4	11.5	10.6	
JULY								
18...	1930	46	52	134	7.5	15.0	9.7	
19...	0740	.52	56	120	7.4	14.5	9.7	
19...	1100	--	54	127	7.9	15.0	9.8	
SEP.								
10...	1630	--	62	160	7.7	15.5	10.5	
11...	0700	--	63	168	8.0	14.0	9.9	
13...	1200	--	--	149	--	14.0	--	
13...	1210	--	62	160	7.8	14.0	--	
NOV.								
21...	1515	3.8	--	127	--	10.5	--	
DEC.								
14...	C1200	20	--	160	--	--	--	
14...	1315	6.0	--	64	--	--	--	
JAN., 1975								
05...	C1200	20	--	65	--	--	--	
14...	1245	A5.9	--	59	--	7.5	--	
FEB.								
07...	1220	13	21	60	7.4	9.0	11.5	
11...	1310	.35	--	52	--	9.5	--	
13...	1545	.35	16	49	6.9	9.0	11.6	
14...	0900	.65	16	54	6.9	7.0	10.3	
18...	1230	3.9	--	54	--	8.5	--	
19...	C1200	170	--	33	--	--	--	
24...	1350	2.9	--	54	--	9.0	--	

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	INSTANTANEOUS DISCHARGE (CFT/S)	ALKALINITY (MG/L)	DUCTAS CACO3 (MG/L)	CONCANCE (MICRO- MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	SPF- CIFIC	DISSOLVED OXYGEN (MG/L)
								DIS-	
11482190 SLIDE CREEK NEAR ORICK--CONTINUED									
MAR., 1975									
13...	1130	5.9	20	61	6.7	7.0	--		
19...	1230	--	--	28	--	9.5	--		
MAY									
06...	1420	3.7	--	66	--	11.0	--		
06...	1440	--	24	--	7.1	11.0	11.0		
JUNE									
03...	1200	--	39	94	7.2	13.0	9.9		
11482200 REDWOOD CREEK AT SOUTH PARK BOUNDARY, NEAR ORICK									
MAY, 1974									
09...	1630	--	--	104	7.5	16.0	9.5		
17...	1330	237	--	107	--	12.0	--		
JUNE									
27...	1240	59	--	153	--	19.0	--		
JULY									
18...	1210	--	66	165	7.9	20.0	9.0		
18...	1410	--	59	152	8.4	23.5	9.0		
18...	1600	--	67	186	8.2	23.5	8.6		
18...	1800	--	70	176	7.9	22.5	8.2		
18...	2000	--	71	181	7.8	22.0	8.0		
18...	2200	--	70	124	7.4	21.5	8.1		
18...	2400	--	70	175	7.4	20.0	8.2		
19...	0200	--	72	185	7.8	20.0	8.2		
19...	0400	--	72	185	7.8	19.5	8.4		
19...	0600	--	72	186	7.6	19.0	8.4		
19...	0800	--	73	182	8.0	18.5	8.6		
19...	1000	--	73	186	8.1	19.5	8.9		
19...	1200	40	73	179	8.1	22.0	8.6		
19...	1220	40	--	162	--	22.0	--		
22...	1230	35	75	196	7.2	21.0	--		
22...	1300	35	73	180	7.2	21.0	8.7		
22...	1330	35	--	179	--	--	--		
SEP.									
10...	1330	12	85	242	8.2	21.5	8.9		
10...	1530	--	84	240	8.2	21.0	8.4		
10...	1730	11	85	245	8.0	20.0	7.8		
10...	1930	--	81	247	8.0	19.5	7.7		
10...	2130	--	83	245	8.0	19.0	7.8		
10...	2330	--	85	247	7.9	18.0	7.5		
11...	0130	--	84	250	7.9	17.5	7.5		
11...	0400	--	85	248	8.0	17.0	7.8		
11...	0615	--	84	250	7.3	16.5	8.3		
11...	0720	12	--	--	7.8	16.5	--		
11...	0800	--	84	242	7.6	16.0	8.1		
11...	0900	--	--	--	8.0	16.5	8.7		
11...	1000	--	90	245	8.2	17.5	8.7		
11...	1100	11	--	235	8.2	19.0	9.0		
11...	1240	11	88	222	8.2	20.5	8.7		
13...	1300	10	87	250	8.4	19.0	9.0		
NOV.									
07...	0135	--	--	255	--	11.5	--		

TABLE 13.--Onsite determinations of water quality--Continued

	INSTAN-	ALKA-	SPE-				DIS-
	TANFOUS	LINITY	CIFIC	CON-			SOLVED
	DIS-	AS	DUCT-	ANCE	PH	TEMPER-	OXYGEN
DATE	TIME	CHARGE (FT./S)	CACO ₃ (MG/L)	(MICHRO- MMOSI)	(UNITS)	(DEG C)	(MG/L)
11482200 REDWOOD CREEK AT SOUTH PARK BOUNDARY, NEAR ORICK--CONTINUED							
NOV.. 1974							
07...	1315	--	--	250	--	12.0	--
09...	1010	--	--	244	--	9.5	--
21...	0015	63	87	237	8.2	10.5	10.0
21...	1430	63	--	295	--	11.0	10.5
21...	1530	72	69	245	7.1	11.0	--
21...	1630	79	66	239	7.8	10.5	--
21...	2030	103	--	224	--	10.0	--
22...	1115	213	--	232	--	9.5	--
22...	1215	--	64	235	8.0	9.5	--
JAN.. 1975							
17...	1110	--	12	87	7.8	7.0	11.9
FEB.							
05...	1745	2960	36	74	7.5	6.0	12.4
06...	1215	2030	--	76	--	7.0	--
06...	1130	--	47	75	7.5	7.5	11.7
06...	1710	2150	--	74	--	8.0	--
06...	1800	--	37	72	7.4	8.0	11.5
07...	1120	--	29	72	7.2	8.0	11.9
07...	1155	2540	--	72	--	7.0	--
09...	0810	A4730	26	77	7.1	7.0	11.6
12...	1525	8250	32	62	6.8	8.5	11.6
13...	1330	7230	--	61	--	8.0	--
13...	1630	6560	23	63	6.8	8.0	11.8
14...	1130	4660	23	68	6.8	6.5	11.1
MAR.							
19...	1845	--	21	54	6.6	8.0	11.6
JUNE							
03...	1415	195	47	123	7.4	19.0	8.7
10...	1145	141	52	137	7.3	19.5	8.5
JULY							
30...	1245	--	--	191	8.9	22.0	9.0
30...	1345	34	--	172	--	--	--
30...	1400	--	73	189	8.6	22.5	8.9
30...	1500	--	--	200	8.7	22.5	9.1
30...	1600	A38	74	199	8.7	22.0	8.7
30...	1700	--	--	185	8.6	22.5	8.5
30...	1800	--	72	191	8.6	21.5	8.5
30...	1900	--	--	188	8.5	21.0	8.6
30...	2000	--	72	194	8.4	20.0	8.6
30...	2100	--	--	196	8.3	19.5	8.5
30...	2200	--	74	193	8.2	19.0	8.6
30...	2300	--	--	192	8.2	19.0	--
30...	2400	A33	75	194	8.2	18.5	--
31...	0010	33	--	190	--	--	--
31...	0100	--	--	196	8.2	18.0	--
31...	0200	--	75	196	8.1	18.0	8.6
31...	0300	--	--	196	8.2	18.0	--
31...	0400	A34	74	197	8.2	17.5	8.5
31...	0500	--	--	197	8.2	17.5	8.6
31...	0600	--	75	201	8.2	17.0	8.8
31...	0700	--	--	201	8.1	17.0	--
31...	0800	--	75	201	8.3	17.0	9.2
31...	0900	--	--	201	8.3	17.0	9.1
31...	1000	--	70	196	8.5	18.0	9.5
31...	1100	--	--	194	8.6	19.5	9.4
31...	1200	A33	73	194	8.6	21.0	10.2
31...	1210	33	--	187	--	--	--
SEP.							
15...	1430	--	80	226	7.7	20.0	--

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	INSTANTANEOUS DISCHARGE (FT ³ /S)	ALKALINITY CACO ₃ (MG/L)	CONDUCTANCE (MICRO-MHOS)	SPECIFIC CONDUCTANCE (UNITS)	PH	TEMPERATURE ATUHF (DEG C)	DIS- SOLVED OXYGEN (MG/L)
11482210 BRIDGE CREEK NEAR ORICK								
APR. 1974								
26...	1025	31	--	67	--	9.0	--	
26...	1105	31	23	73	7.3	9.0	11.6	
MAY								
13...	1400	--	29	90	7.2	14.0	10.2	
JULY								
23...	--	--	--	152	--	--	--	
23...	1130	4.2	50	155	7.1	17.5	8.7	
23...	1230	4.2	50	152	7.1	17.5	--	
SEP.								
16...	1200	--	69	208	7.8	16.0	9.2	
JAN. 1975								
09...	1300	--	--	122	--	7.0	11.5	
FEB.								
08...	1130	90	--	65	--	9.0	--	
13...	1340	285	--	53	--	--	--	
24...	1320	--	--	54	--	9.5	--	
MAR.								
03...	1430	82	16	30	6.1	10.0	10.9	
26...	1325	200	--	53	--	9.0	--	
APR.								
02...	1340	68	--	69	--	--	--	
MAY								
21...	1130	24	33	100	7.5	13.0	10.3	
JUN.								
01...	1210	--	40	123	7.4	16.0	9.0	
AUG.								
11...	1125	--	--	217	--	19.0	9.5	
SEP.								
16...	1115	--	90	248	7.9	16.0	9.7	
11482220 REDWOOD CREEK ABOVE HARRY WIER CREEK, NEAR ORICK								
MAY 1974								
13...	1630	--	45	122	7.5	14.0	10.0	
JULY								
18...	1700	--	70	193	8.2	20.5	8.7	
18...	2230	--	69	175	7.8	20.0	8.3	
19...	0835	--	71	158	7.8	18.5	9.1	
SEP.								
10...	1245	--	--	229	7.5	21.0	7.6	
10...	1700	--	94	254	7.9	21.0	7.6	
10...	2045	--	95	246	7.8	19.0	7.0	
11...	0100	--	94	238	7.6	17.5	6.4	
11...	0500	--	93	244	7.6	17.0	5.9	
11...	0545	--	--	--	--	17.0	7.1	
11...	0900	--	97	245	7.7	17.0	7.1	
OCT.								
28...	1440	--	--	249	--	--	--	
NOV.								
07...	0130	--	94	--	--	11.0	9.7	
07...	0300	--	--	276	--	11.5	--	
07...	0930	--	76	256	7.4	10.0	10.5	
07...	1315	60	--	242	--	11.0	--	
07...	1545	--	70	263	7.7	11.0	--	
08...	0900	59	--	247	--	10.0	--	
08...	0915	--	82	257	7.8	10.0	10.7	
20...	1900	--	74	250	7.4	10.5	10.9	
21...	0930	50	--	245	--	11.0	--	
21...	1020	--	72	249	7.6	11.0	10.5	
21...	1850	--	54	226	7.2	11.0	10.7	
21...	2020	110	--	225	--	11.0	--	
22...	0830	--	62	219	7.3	9.0	11.5	
22...	0950	165	--	214	--	9.0	--	

TABLE 13.--Onsite determinations of water quality--Continued

DATE	INSTAN- TANEOUS TIME DIS- CHARGE (FT ³ /S)	ALKA- LINITY CACO ₃ (MG/L)	SPECI- FIC CON- DUCT- ANCE (MICRO- MHOES)	PH (UNITS)	TEMPER- ATURE (DEG C)	SOLVED DIS- OXYGEN (MG/L)					
						DIS- TANCE (METERS)					
11482220 REDWOOD CREEK ABOVE HARRY WIER CREEK, NEAR CRICK--CONTINUED											
FEB., 1975											
05...	1700	--	--	83	--	--					
05...	1445	--	29	74	7.2	7.0					
07...	0815	--	26	66	6.9	7.0					
07...	1215	2600	--	73	--	7.5					
07...	1545	--	26	62	6.9	8.0					
08...	0915	--	27	65	7.1	7.5					
09...	0550	--	27	63	7.3	8.0					
09...	1030	4300	--	70	--	8.0					
12...	1440	8600	--	68	--	--					
13...	1525	6030	--	62	--	--					
13...	1400	--	26	67	7.7	8.0					
14...	0130	--	26	67	7.6	8.0					
14...	0830	--	23	68	7.2	7.0					
14...	0845	4600	--	62	--	--					
MAR.											
21...	1310	6900	--	57	--	--					
JULY											
30...	1300	36	--	209	--	21.5					
30...	1315	--	--	205	--	21.5					
30...	1345	--	--	--	7.9	--					
30...	1400	--	80	223	8.0	22.5					
30...	1500	--	76	207	--	23.0					
30...	1600	--	76	209	8.0	23.0					
30...	1700	--	78	220	8.1	22.0					
30...	1800	--	--	212	7.8	21.5					
30...	1900	--	79	211	8.0	20.0					
30...	2000	--	--	219	7.9	19.0					
30...	2100	--	80	211	7.6	18.5					
30...	2200	--	--	207	7.8	18.5					
30...	2300	--	80	196	7.8	18.0					
30...	2400	--	80	202	7.8	17.5					
31...	0045	36	--	209	--	17.5					
31...	0100	--	79	202	7.7	17.0					
31...	0200	--	--	208	7.8	17.0					
31...	0300	--	80	201	7.8	17.0					
31...	0500	--	81	208	7.4	16.0					
31...	0600	--	--	209	7.9	16.0					
31...	0700	--	81	211	7.9	15.0					
31...	0800	--	--	206	7.9	16.0					
31...	0900	--	79	215	7.6	16.0					
31...	1240	36	--	209	--	22.0					
11482225 HARRY WIER CREEK NEAR ORICK											
APR., 1974											
12...	1530	12	16	52	--	10.0					
12...	1545	12	18	--	7.8	10.0					
18...	1400	4.1	--	50	--	--					
MAY											
13...	1550	--	26	72	7.3	10.0					
JULY											
18...	1200	--	--	106	--	14.0					
18...	1310	--	45	108	7.5	14.0					
18...	1400	--	37	108	7.6	14.0					
18...	1500	--	37	112	7.7	14.0					
18...	1600	4.3	37	110	7.7	14.0					
18...	1700	--	37	110	7.3	14.0					
18...	1800	--	--	110	7.4	14.0					
18...	1900	A.43	37	--	7.0	14.0					
18...	2000	A.43	38	108	7.1	14.0					
18...	2100	A.43	35	--	7.4	14.0					
18...	2200	A.43	36	110	7.4	14.0					

TABLE 13.--Onsite determinations of water quality--Continued

INSTAN-	ALKA-	SPE-	CIFIC	CON-	DIS-	DIS-
TANEOUS	LINITY	DUCT-	PH	TEMPER-	ATURE	SOLVED
TIME	CHARGE	CACO ₃	(MICRO-	(DEG C)	OXYGEN	(MG/L)
DATE		(FT ³ /S)	(MG/L)	MHOH)	(UNITS)	
11482225 HARRY WIER CREEK NEAR ORICK--CONTINUED						
JULY, 1974						
-18...	2300	A.43	36	110	7.5	14.0
-19...	2600	A.43	36	110	7.4	14.0
-19...	0100	A.43	36	110	7.4	14.0
-19...	0200	A.43	36	110	7.4	14.0
-19...	0400	A.43	35	110	7.4	14.0
-19...	0500	A.43	--	110	7.4	14.0
-19...	0600	A.43	35	111	7.4	14.0
-19...	0700	A.43	38	110	7.2	14.5
-19...	0800	A.43	35	111	7.4	14.0
-19...	0900	A.43	36	112	7.3	14.0
-19...	1000	A.43	39	110	7.2	14.0
-19...	1100	A.43	35	110	7.5	14.0
-19...	1200	A.43	36	110	7.6	14.0
-23...	1345	A.34	39	105	7.3	14.0
-23...	1400	A.34	37	113	7.3	14.0
-23...	1420	A.34	--	109	--	--
SEP.						
-10...	1205	A.04	49	117	7.5	14.0
-10...	1400	A.04	50	126	7.4	14.5
-10...	1500	A.04	50	126	7.6	14.5
-10...	1600	A.04	--	126	7.6	14.5
-10...	1700	A.03	49	125	7.3	14.5
-10...	1800	A.03	--	126	7.1	14.0
-10...	1900	A.03	49	127	7.4	14.0
-10...	2000	A.04	--	127	7.1	14.0
-10...	2100	A.04	--	127	--	14.0
-10...	2200	A.04	48	127	7.2	14.0
-10...	2300	A.04	--	127	--	14.0
-10...	2400	A.04	47	124	7.1	14.0
-11...	0100	A.04	--	124	--	--
-11...	0200	A.04	48	127	7.6	13.5
-11...	0300	A.04	--	127	--	13.5
-11...	0400	A.04	49	127	7.7	13.5
-11...	0600	A.04	44	124	7.3	13.5
-11...	0700	A.04	48	125	7.5	13.5
-11...	0800	A.04	49	122	7.5	13.0
-11...	0900	A.04	49	127	7.4	13.0
-11...	1000	A.04	--	128	--	13.5
-11...	1100	A.04	50	130	7.5	13.5
-11...	1200	A.04	49	134	7.5	13.5
-16...	1330	A.17	51	138	7.0	13.0
-16...	1410	A.17	--	124	--	13.0
OCT.						
-28...	1430	1.7	--	145	--	--
NOV.						
06...	2400	--	50	144	7.7	10.0
07...	0130	.17	--	135	--	9.0
07...	0445	--	--	138	7.8	9.0
07...	0455	.24	46	140	--	9.0
07...	0510	--	--	--	--	9.0
07...	0555	.41	46	136	--	9.0
07...	0615	.41	--	126	--	9.0
07...	0630	--	--	145	7.6	9.0
07...	0655	.60	45	140	--	9.0
07...	0745	1.1	--	119	--	9.5
07...	0755	1.1	42	128	--	9.5
07...	0830	--	45	136	7.6	9.5
07...	0855	1.7	47	126	--	9.5
07...	0955	2.4	39	120	--	9.0
07...	1040	--	--	--	--	9.5
07...	1055	3.0	36	114	--	10.0

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	INSTANTANEOUS DISCHARGE (FT ³ /S)	SPECIFIC COND. (MG/L)	ALKALINITY (MG/L)	DUCTANCE (MICROMHOS)	PH	TEMPERATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)
11482223 HARRY WIER CREEK NEAR ORICK--CONTINUED								
NOV., 1974								
07...	1100	43.0	--	104	--	10.0	--	
07...	1120	--	--	120	7.6	10.0	11.2	
07...	1155	43.5	38	118	--	10.0	--	
07...	1255	43.5	36	116	--	10.0	--	
07...	1355	43.2	42	121	--	10.5	--	
07...	1405	--	39	126	--	10.0	10.9	
07...	1455	42.9	39	126	--	10.0	--	
07...	1520	42.7	--	130	--	10.0	--	
07...	1655	42.2	39	128	--	--	--	
07...	1740	--	41	140	7.8	9.5	11.0	
07...	1800	42.0	--	120	--	9.5	--	
07...	1855	41.8	39	129	--	9.0	--	
08...	0255	41.0	40	142	7.5	9.0	11.0	
08...	0655	42	44	144	7.6	9.0	11.1	
08...	0750	42	--	127	--	9.0	--	
20...	1920	--	--	127	--	--	11.0	
20...	2030	--	42	--	7.6	10.0	--	
20...	2040	45.54	--	122	--	10.0	--	
21...	0330	--	42	127	7.6	10.0	10.7	
21...	1000	--	40	127	7.3	10.0	10.6	
21...	1200	45.50	--	121	--	10.0	--	
21...	1215	--	41	130	7.6	10.0	9.6	
21...	1330	--	40	127	7.3	10.0	10.8	
21...	1420	41	--	115	--	10.0	--	
21...	1530	--	37	116	7.2	10.0	11.0	
21...	1650	45.5	--	106	--	10.0	--	
21...	1715	--	32	110	7.3	10.0	11.3	
21...	1820	48.2	--	102	--	10.0	--	
21...	2100	--	--	110	7.6	10.0	11.0	
21...	2330	44.1	--	114	7.3	9.5	10.7	
22...	0225	--	31	116	7.2	9.0	10.8	
22...	0315	4.1	--	110	--	9.0	--	
22...	0800	A2.4	36	116	7.2	8.5	11.3	
22...	0810	2.4	--	110	--	8.5	--	
JAN., 1975								
05...	0100	--	--	52	--	--	--	
17...	1300	--	21	80	7.1	8.0	11.8	
FER.								
05...	1725	--	14	49	7.1	7.5	11.9	
05...	1825	42	--	45	--	7.5	--	
06...	1035	--	15	45	7.0	8.0	11.3	
06...	1045	31	15	49	7.1	8.0	--	
06...	1600	31	13	44	6.9	8.5	11.5	
07...	0015	--	13	44	6.7	8.5	11.5	
07...	0800	--	15	44	6.8	8.5	10.8	
07...	1530	--	16	44	7.0	9.0	11.7	
07...	1615	27	15	47	7.0	10.0	--	
08...	0900	A23	15	44	7.0	8.5	11.7	
08...	0920	23	--	48	--	8.5	--	
08...	1915	--	15	43	7.1	9.5	11.1	
08...	2000	20	11	47	7.2	9.5	--	
08...	2055	23	--	47	--	9.5	--	
08...	2100	22	12	48	7.2	9.5	--	
08...	2200	28	13	45	7.2	9.5	--	
08...	2215	--	15	40	7.0	9.5	11.1	
08...	2300	36	11	44	7.2	9.5	--	
08...	2330	40	--	42	--	8.5	--	
08...	2400	42	13	42	7.1	9.5	--	

TABLE 13.--Onsite determinations of water quality--Continued

APR.	TIME	INSTAN- TANEOUS DIS- CHARGE (FT ³ /S)	ALKALI- LINITY CACO ₃ (MG/L)	CON- DUCT- ANCE (MICRO- MHO)	PH	TEMPER- ATURE (DEG C)	SPE- CIFIC DIS- SOLVED OXYGEN (MG/L)						
							(UNITS)						
11482225 HARRY WIER CREEK NEAR ORICK--CONTINUED													
FEB., 1975													
09...	0100	44	16	40	7.1	9.0	11.4						
09...	0130	42	--	41	--	9.0	--						
09...	0200	42	12	42	7.2	9.0	--						
09...	0300	41	12	42	7.2	9.0	--						
09...	0400	40	14	42	7.0	9.0	11.2						
09...	0455	38	--	45	--	9.0	--						
09...	0500	39	11	44	7.2	9.0	--						
09...	0600	37	14	44	7.2	9.0	--						
09...	0800	33	14	45	7.1	9.0	--						
09...	0825	32	--	46	--	9.0	--						
09...	0900	--	14	44	7.0	9.0	11.6						
09...	1000	31	15	46	7.1	--	--						
09...	1205	29	--	46	--	9.0	--						
12...	1310	69	--	41	--	--	--						
12...	1510	--	--	57	--	9.5	11.2						
12...	1615	69	--	46	--	--	--						
12...	2010	73	--	43	--	10.0	--						
12...	2030	--	14	45	7.1	10.0	11.2						
12...	2130	97	--	37	--	10.0	--						
12...	2215	104	--	39	--	10.0	--						
12...	2330	--	12	43	6.8	9.5	11.6						
13...	0030	113	--	38	--	9.5	--						
13...	0145	--	12	46	6.7	9.5	11.5						
13...	0245	98	--	39	--	9.0	--						
13...	0400	--	14	46	7.1	9.5	11.4						
13...	0550	94	--	39	--	9.5	--						
13...	0845	92	--	40	--	9.5	--						
13...	0850	--	12	46	7.2	9.5	11.9						
13...	1015	98	--	39	--	9.5	--						
13...	1050	--	14	45	7.3	9.0	11.8						
13...	1230	90	--	40	--	9.0	--						
13...	1720	74	--	41	--	9.0	--						
13...	1730	--	16	46	7.6	9.0	11.8						
14...	0100	--	15	48	7.7	8.0	11.8						
14...	0130	62	--	42	--	8.0	--						
14...	0830	--	17	49	7.6	7.5	12.2						
14...	1000	53	--	42	--	7.5	--						
24...	1500	33	--	45	--	9.5	--						
MAR.													
21...	1250	--	--	31	--	--	--						
APR.													
03...	1045	11	--	45	--	7.0	--						
MAY													
21...	1550	3.5	27	70	7.4	11.0	10.3						
JUN													
01...	1410	--	29	85	7.2	12.5	10.2						
01...	1450	1.9	--	82	--	12.5	--						
01...	1500	1.9	31	87	7.2	12.5	--						
07...	1300	--	31	86	7.2	12.0	10.3						
07...	1330	1.6	35	91	7.2	12.0	--						
JULY													
30...	1415	--	48	152	7.4	14.0	9.6						
30...	1645	--	--	149	7.8	14.0	9.8						
30...	1800	--	41	159	7.0	14.0	9.3						
30...	1930	--	47	143	7.1	13.5	9.4						
30...	2030	--	48	147	7.6	13.5	9.4						
30...	2130	--	--	134	7.6	13.5	--						
30...	2230	--	48	133	7.6	13.0	9.5						
30...	2330	--	--	135	7.3	13.0	9.6						
31...	0030	--	47	134	7.8	13.0	9.6						
31...	0130	--	--	131	7.4	13.0	9.6						
31...	0230	--	47	133	7.7	12.5	9.6						

TABLE 13.--Onsite determinations of water quality--Continued

INSTAN-	ALKA-	SPE-					
TANEous	LINITY	CIFIC	CON-	DUCT-	PH	TEMPER-	DIS-
DATE	TIME	CHARGE	"AS A	ANCE	(UNITS)	ATURE	SOLVED
		(FT ³ /S)	CACO ₃ (MG/L)	(MICRO- MHOS)		(DEG C)	OXYGEN (MG/L)
11482225 HARRY WIER CREEK NEAR ORICK--CONTINUED							
JULY, 1975							
31...	0430	--	48	135	7.6	12.5	9.6
31...	0530	--	--	135	7.6	12.0	9.7
31...	0630	--	47	139	7.8	12.5	9.7
31...	0730	--	--	136	7.7	12.5	9.7
31...	0830	--	51	136	8.0	12.0	9.8
31...	0930	--	--	134	7.9	13.0	--
31...	1030	--	47	147	8.2	12.5	--
31...	1130	.30	--	129	7.7	12.5	9.8
SEP.							
16...	1245	--	54	159	7.5	14.0	9.9
11482230 TOM MCDONALD CREEK NEAR ORICK							
APR., 1974							
26...	1305	22	--	37	--	8.5	--
26...	1335	19	14	39	7.1	9.0	11.6
MAY							
14...	0955	--	17	49	7.1	8.5	11.0
JULY							
23...	1245	2.5	19	61	7.3	16.5	9.4
23...	1500	2.5	--	56	--	--	--
23...	1505	2.5	--	55	--	--	--
23...	1515	2.5	16	57	7.3	16.5	--
SEP.							
11...	1200	1.2	--	63	--	15.0	--
24...	1150	--	19	75	7.2	11.0	11.0
OCT.							
28...	1630	61	--	63	--	--	--
JAN., 1975							
05...	1200	125	--	40	--	--	--
09...	1545	--	--	54	--	7.0	10.5
09...	1600	115	--	38	--	7.0	--
FEB.							
11...	1100	98	--	42	--	9.0	--
19...	1015	--	--	--	7.0	--	--
19...	1045	550	--	32	--	9.0	--
20...	1115	177	--	36	--	7.0	--
MAR.							
04...	1440	--	--	40	--	9.0	--
04...	1445	--	10	--	6.5	9.0	11.1
APR.							
02...	1340	63	--	60	--	8.0	--
MAY							
14...	1105	18	--	71	--	10.5	--
30...	1340	--	15	48	7.3	14.0	10.6
AUG.							
10...	1630	--	--	69	--	15.0	9.7
SEP.							
16...	1600	--	17	83	6.4	14.0	9.6
11482240 FORTYFOUR CREEK NEAR ORICK							
MAY, 1974							
08...	1430	6.4	--	42	--	11.5	--
08...	1500	6.4	12	42	6.5	11.5	10.8
JULY							
23...	1130	1.6	21	55	7.2	12.5	9.9
23...	1210	1.6	--	80	--	--	--
23...	1215	1.6	--	51	--	--	--
23...	1230	1.6	16	54	7.2	13.0	--
AUG.							
09...	1120	--	--	51	--	13.5	--
DEC.							
21...	1230	21	--	44	--	--	--

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	INSTANTANEOUS DISCHARGE (FT ³ /S)	ALKALINITY AS CACO ₃ (MG/L)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)
11482240 FORTYFOUR CREEK NEAR ORICK--CONTINUED							
JAN., 1975							
10...	1315	41	--	41	--	9.0	--
FEB.							
11...	1155	28	--	47	--	--	--
24...	1400	33	--	38	--	9.0	--
MAR.							
04...	1130	--	9	--	6.4	9.0	11.4
04...	1145	A19	--	41	--	9.0	--
18...	C1200	400	--	29	--	--	--
25...	1520	95	--	35	--	9.5	--
APR.							
03...	1415	28	--	36	--	7.0	--
MAY							
13...	1050	B.8	--	41	--	10.5	--
13...	1145	--	11	--	6.5	11.0	10.5
AUG.							
11...	1840	.70	--	52	--	14.0	9.7
11482250 MILLER CREEK NEAR ORICK							
APR., 1974							
25...	1030	--	--	48	--	7.5	--
25...	1100	1.0	19	52	7.2	7.5	11.8
MAY							
10...	1015	--	23	64	7.1	9.5	10.7
JULY							
18...	1200	.03	32	83	7.2	14.0	9.9
18...	1400	A.02	30	79	7.2	14.0	9.9
18...	1600	A.03	34	79	7.2	14.0	9.6
18...	1800	A.03	32	75	7.5	14.0	9.7
18...	2000	A.04	33	76	6.6	14.0	9.7
18...	2200	A.03	32	75	6.8	14.0	9.8
18...	2400	A.03	33	76	7.2	13.5	9.7
19...	0200	A.03	32	77	7.4	13.5	9.7
19...	0400	A.03	35	76	7.2	13.5	9.7
19...	0600	.03	36	74	6.5	13.5	9.5
19...	0800	A.03	30	75	6.5	13.5	10.0
19...	1000	A.03	32	77	7.0	13.0	9.8
19...	1200	A.02	32	77	7.3	14.0	9.9
24...	1250	--	--	70	--	15.0	--
24...	1300	E.05	34	79	6.9	15.0	--
SEP.							
10...	1200	A.04	26	86	6.9	13.0	9.2
10...	1400	A.04	37	96	6.9	13.5	9.5
10...	1600	A.03	31	78	6.9	14.0	9.2
10...	1800	A.03	36	98	7.5	13.5	9.7
10...	2000	A.03	36	97	7.2	13.5	9.0
10...	2200	A.03	36	97	7.6	14.0	8.7
10...	2400	A.05	36	97	7.8	14.0	8.7
11...	0400	A.05	37	97	7.8	12.5	8.8
11...	0600	A.05	36	97	7.4	12.5	9.3
11...	0800	A.05	36	97	7.7	12.5	9.3
11...	1000	A.04	36	92	7.5	12.5	9.2
11...	1200	A.04	47	100	7.4	13.0	9.5
17...	1430	.03	35	93	7.2	12.0	9.1
NOV.							
06...	2200	--	47	72	7.4	12.0	9.9
06...	2245	A.11	--	85	--	--	--
07...	0430	.14	34	90	--	11.0	9.6
07...	0730	1.2	30	84	7.7	--	9.7
07...	1030	1.1	--	83	7.7	--	--

TABLE 13.--Onsite determinations of water quality--Continued

INSTAN-	ALKA-	SPF=	CIFIC	DIS-	PH	TEMPER-	DIS-
TANEOUS	LINITY	CON-	DUCT-	CHARGE	(MICRO-	ATURE	SOLVED
DATE	(FT ³ /S)	CACO ₃	MHO ₃	(MG/L)	(UNITS)	(DEG C)	OXYGEN
11482250 MILLER CREEK NEAR ORICK--CONTINUED							
NOV., 1974							
07...	1315	.89	28	81	7.5	12.0	10.2
07...	1330	.89	--	79	--	--	--
07...	1645	.78	--	86	--	10.0	--
08...	0845	.43	31	84	7.5	9.0	10.5
20...	2200	.22	31	75	7.4	10.0	10.4
21...	0200	--	--	65	--	10.0	--
21...	0530	.28	30	87	7.5	10.0	10.3
21...	0830	.22	30	93	7.2	10.0	10.2
21...	1230	.27	29	87	7.0	10.5	10.0
21...	1455	4.6	20	64	6.8	9.5	10.6
21...	1745	2.4	--	68	--	9.5	--
21...	1930	--	24	60	7.0	9.5	9.9
21...	2210	1.4	--	80	--	9.5	--
22...	0930	--	27	72	7.0	9.0	10.9
22...	1000	A.83	--	70	--	9.0	--
JAN., 1975							
20...	1530	1.9	--	55	6.1	9.0	--
FER.							
05...	1630	--	13	--	7.6	--	11.4
05...	1700	8.3	41	43	--	8.0	--
05...	1300	--	52	14	--	7.3	9.0
06...	1345	7.4	--	89	--	9.0	--
07...	1045	7.1	--	46	--	9.0	--
08...	0515	--	14	--	7.4	9.5	10.9
08...	2015	7.8	--	46	--	9.5	--
08...	2050	--	14	59	7.0	9.5	10.9
08...	2230	9.6	--	43	7.3	9.5	--
09...	0015	9.1	--	41	--	9.0	--
09...	0115	--	13	47	7.4	9.0	11.0
09...	0415	9.4	--	41	7.1	9.0	--
09...	0800	8.7	--	44	--	9.0	--
09...	0830	--	14	49	7.0	9.0	9.9
12...	1500	12	--	40	--	10.0	--
12...	1515	--	16	48	7.4	10.0	10.8
12...	1830	--	14	47	7.2	10.0	10.8
12...	1850	10	--	42	--	10.0	--
12...	2130	17	--	39	--	10.0	--
12...	2200	--	13	45	7.2	10.0	11.1
13...	0015	20	--	40	--	10.0	--
13...	0030	--	--	45	7.3	10.0	--
13...	0500	--	13	48	7.3	9.5	10.7
13...	0530	19	--	44	--	9.5	--
13...	0900	--	14	44	7.2	7.5	11.1
13...	0950	20	--	41	--	9.5	--
13...	1300	--	--	48	7.4	9.5	--
13...	1430	17	--	41	--	10.0	--
13...	1500	--	--	47	7.4	--	--
13...	1630	--	14	47	7.3	--	11.0
13...	2020	14	--	41	--	10.0	--
13...	2100	--	--	51	7.2	9.0	--
14...	0030	--	14	50	7.2	8.0	11.3
14...	0045	13	--	42	--	8.0	--
14...	0800	A.13	15	49	7.3	8.5	11.4
14...	0815	11	--	42	--	10.0	--
25...	1445	1.1	--	45	--	10.0	--
27...	1230	.43	--	46	--	10.0	--

TABLE 13.--Onsite determinations of water quality--Continued

					SPF-		
	INSTAN-	ALKA-	SPF-		CIFIC		
	TANEous	LINITY	DUCT-		CON-		
	DIS-	AS :	ANCE				
	TIME	CHARGE	CACO ₃	(MICRO-			
		(FT ³ /S)	(MG/L)	MHO ₃)	(UNITS)	(DEG C)	DIS-
	DATE						SOLVED
							OXYGEN
							(MG/L)
11482250 MILLER CREEK NEAR ORICK--CONTINUED							
MAR., 1975							
12...	1400	--	14	--	6.4	9.0	11.0
12...	1430	3.1	--	46	--	9.0	--
18...	1400	150	--	21	--	--	--
20...	1520	17	--	32	--	9.0	--
25...	1305	31	--	35	--	--	--
APR.							
11...	1445	--	--	--	--	9.5	11.5
11...	1515	3.4	--	46	--	--	--
MAY							
07...	1100	1.8	--	48	--	9.0	--
07...	1110	--	14	--	6.5	9.0	10.8
31...	1500	--	21	52	7.4	15.0	9.7
31...	1510	.70	18	55	7.4	15.0	--
31...	1515	.70	--	54	--	15.0	--
JUNE							
06...	1325	.57	--	56	--	13.5	--
06...	1450	--	20	52	7.1	13.5	10.0
06...	1530	.57	18	57	7.1	13.5	--
AUG.							
12...	1530	--	--	83	--	13.0	9.9
SEP.							
21...	0930	--	29	82	6.5	12.0	10.2
11482260 MILLER CREEK AT MOUTH, NEAR ORICK							
APR., 1974							
11...	1600	6.0	16	50	7.2	10.0	11.5
MAY							
14...	1410	--	20	65	6.6	9.0	11.2
JULY							
18...	1215	A.10	34	80	7.3	13.5	10.6
18...	1300	A.10	30	85	7.3	13.5	10.5
18...	1400	A.10	29	81	7.3	13.0	10.4
18...	1500	A.10	28	81	7.2	13.0	10.4
18...	1600	A.10	28	80	7.2	14.0	10.3
18...	1700	A.10	27	81	7.1	13.5	10.3
18...	1800	A.10	28	81	7.2	13.0	10.4
18...	1900	A.09	28	80	7.1	13.5	10.4
18...	2000	A.09	27	82	7.0	13.5	10.3
18...	2100	A.09	26	80	6.8	13.5	10.3
18...	2200	A.09	27	82	6.9	13.0	10.4
18...	2300	A.09	30	85	7.1	13.0	10.3
18...	2400	A.09	29	82	7.1	13.0	10.4
19...	0100	A.09	28	83	7.1	13.0	10.4
19...	0200	A.10	29	84	7.1	13.0	10.5
19...	0300	A.10	28	85	7.1	13.0	10.5
19...	0400	A.11	27	83	6.9	13.0	10.3
19...	0500	A.11	28	83	7.2	13.0	10.4
19...	0600	A.12	28	84	7.2	13.5	10.4
19...	0700	A.12	29	84	7.2	13.0	10.4
19...	0800	A.12	29	84	7.2	13.0	10.4
19...	0900	A.12	29	84	7.2	13.0	10.3
19...	1000	A.12	28	81	7.2	13.0	10.4
19...	1100	A.12	28	84	7.2	13.0	10.3
19...	1200	A.12	28	80	7.2	13.5	10.1
24...	1030	.16	28	84	6.9	13.0	10.2
24...	1045	.16	--	76	--	13.0	--
AUG.							
09...	1340	--	--	69	--	14.5	--

TABLE 13.--Onsite determinations of water quality--Continued

DATE	INSTANTANEOUS TIME	DISCHARGE (FT ³ /S)	ALKALINITY CACO ₃ (MG/L)	SPECIFIC CONDUCTANCE (MICRO- MHO/S)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)
11482260 MILLER CREEK AT MOUTH, NEAR ORICK--CONTINUED							
SEP., 1974							
10...	1300	A.04	33	99	7.2	13.5	9.8
10...	1400	A.04	33	95	7.3	13.5	9.8
10...	1500	A.04	32	97	7.4	13.5	9.8
10...	1600	A.04	32	96	7.2	13.5	9.8
10...	1700	A.04	31	95	7.2	13.5	9.8
10...	1800	A.04	32	95	7.2	13.5	9.8
10...	1900	A.04	32	95	7.2	13.5	9.6
10...	2000	A.04	32	95	7.3	13.5	9.6
10...	2100	A.04	32	95	7.3	13.5	9.6
10...	2200	A.04	--	95	7.4	13.5	9.5
10...	2300	A.04	32	95	7.4	13.0	9.6
10...	2400	A.04	32	95	7.4	13.0	9.8
11...	0100	A.04	32	95	7.3	13.0	9.8
11...	0200	A.04	--	95	7.4	13.0	9.8
11...	0300	A.04	--	95	7.4	13.0	9.8
11...	0400	A.04	32	95	7.4	13.0	9.8
11...	0500	A.04	--	90	7.4	13.0	9.8
11...	0615	A.04	33	95	7.4	12.5	9.7
11...	0700	A.04	--	95	7.5	12.5	9.7
11...	0800	A.04	33	92	7.6	12.5	9.7
11...	0900	A.04	--	94	7.5	12.5	9.8
11...	1100	A.04	--	92	7.4	12.5	9.6
11...	1200	A.03	32	95	7.4	13.0	9.8
11...	1300	A.03	32	95	7.4	13.0	9.8
17...	1145	.05	--	90	--	12.0	--
17...	1200	.05	35	109	6.6	12.0	9.9
OCT.							
28...	1500	1.5	--	106	--	10.0	--
NOV.							
07...	0040	--	31	--	6.2	9.5	10.8
07...	0145	--	30	--	6.2	10.0	--
07...	0245	.10	--	93	--	--	--
07...	0430	--	--	--	6.2	9.0	--
07...	0500	--	30	--	6.5	9.0	10.8
07...	0800	--	--	--	6.6	10.0	--
07...	0930	2.0	--	86	--	10.0	--
07...	0940	--	--	--	5.9	9.5	--
07...	1115	--	25	--	5.5	10.0	10.8
07...	1120	2.0	--	92	--	10.0	--
07...	1620	--	27	--	--	10.0	11.0
07...	1625	1.2	--	94	--	10.0	--
20...	2230	--	28	86	7.4	9.5	11.0
20...	2250	.42	--	88	--	9.5	--
21...	0130	--	--	89	7.4	9.5	--
21...	0215	--	--	86	7.4	--	--
21...	0300	--	28	86	7.4	9.5	10.9
21...	0500	--	--	86	7.4	9.5	--
21...	0600	--	28	84	7.4	9.5	10.9
21...	0800	--	28	85	7.5	10.0	10.8
21...	1000	--	28	83	7.4	10.5	10.6
21...	1130	.70	--	86	--	10.0	--
21...	1200	--	27	85	7.5	10.0	--
21...	1300	--	26	83	7.4	10.0	10.7
21...	1400	--	26	79	7.4	9.5	--
21...	1420	.90	--	81	--	9.5	--
21...	1500	--	24	79	7.4	9.5	11.0
21...	1530	6.3	--	78	--	9.5	--
21...	1600	--	--	80	7.4	9.0	--
21...	1610	5.9	--	82	--	9.0	--
21...	1710	--	22	80	7.4	9.0	11.2
21...	1715	5.0	--	77	--	9.0	--

TABLE 13.--Onsite determinations of water quality--Continued

INSTAN- DATE	TIME	DIS- (FT ³ /S)	CHARGE	ALKA- LITY (MG/L)	CON- DUCT- ANCE (MICRO- MHOES)	SPECI- FIC CON- DUCT- ANCE (MICRO- MHOES)	PH	TEMPER- ATURE (DEG C)	SOLVED DIS- OXYGEN (MG/L)
									(UNITS)
11482260 MILLER CREEK AT MOUTH, NEAR ORICK--CONTINUED									
NOV., 1974									
21...	1830	4.4		17	75	7.2	9.0	11.0	
21...	2000	--		19	80	7.3	9.0	11.2	
21...	2135	3.1		--	84	--	9.0	--	
21...	2300	--		21	81	7.4	9.0	11.3	
22...	0100	--		28	81	7.2	9.0	11.3	
22...	0200	--		--	82	7.2	8.5	--	
22...	0300	--		23	82	7.4	8.5	11.4	
22...	0410	2.3		--	85	--	8.5	--	
22...	0500	--		--	82	7.4	8.0	--	
22...	0600	--		23	81	7.4	8.5	11.5	
22...	0620	2.0		--	85	--	8.5	--	
22...	0710	--		--	81	7.4	8.5	--	
22...	0800	--		24	82	7.4	8.0	11.4	
22...	0910	1.8		--	83	--	8.5	--	
DEC.									
14...	C1200	33		--	41	--	--	--	
JAN., 1975									
20...	1300	--		17	91	6.4	8.0	11.4	
FEB.									
05...	1810	17		--	50	--	8.0	--	
05...	1840	--		12	60	6.7	8.0	11.3	
06...	1910	--		13	51	6.7	9.0	11.5	
08...	2035	--		16	49	6.8	10.0	10.8	
08...	2050	15		--	48	--	10.0	--	
08...	2245	19		11	41	6.5	10.0	10.7	
09...	0005	18		--	41	--	10.0	--	
09...	0045	--		13	43	6.7	9.5	11.1	
09...	0300	--		12	44	6.7	9.5	11.2	
09...	0330	17		--	46	--	9.5	--	
09...	0700	--		13	44	6.7	9.5	10.9	
09...	0800	14		--	50	--	9.5	--	
11...	1120	18		--	49	--	--	--	
12...	1630	29		--	45	--	10.5	--	
12...	1725	--		12	56	6.7	10.0	11.1	
12...	1800	28		--	46	--	10.0	--	
12...	2100	--		10	42	6.0	10.0	11.3	
12...	2150	36		--	33	--	--	--	
12...	2300	--		--	--	6.7	10.0	--	
12...	2400	--		--	32	6.9	10.0	--	
13...	0100	--		12	54	6.8	10.0	11.3	
13...	0300	--		--	56	7.0	10.0	--	
13...	0400	--		--	55	7.0	10.0	--	
13...	0500	--		13	56	7.0	10.0	--	
13...	0530	--		--	--	--	--	11.1	
13...	0700	--		--	56	7.0	10.0	--	
13...	0800	--		--	56	7.1	9.5	--	
13...	0900	44		--	40	--	9.5	--	
13...	1000	44		--	43	--	9.5	--	
13...	1100	--		14	57	7.1	9.5	--	
13...	1300	--		13	57	7.0	9.5	11.4	
13...	1305	37		--	44	--	9.5	--	
13...	1500	--		--	57	7.1	9.5	--	
13...	1700	--		14	58	7.1	9.0	11.3	
13...	1900	--		--	58	7.0	9.0	--	
13...	2100	--		--	58	7.1	9.0	--	
13...	2200	--		--	58	7.1	8.5	--	
13...	2300	--		14	59	7.1	8.5	11.4	

TABLE 13.--Onsite determinations of water quality--Continued

			INSTAN-	ALKA-	SPF-			
			TANEous	LINITY	CIFIC			
			DIS-	AS	CON-			
	TIME	DATE	CHARGE (FT ³ /S)	CACO ₃ (MG/L)	(MICRO- MHOS)	PH	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)
					(UNITS)			
			11482260	MILLER CREEK AT MOUTH, NEAR ORICK--CONTINUED				
FEB.,	1975							
14...	0010	31	--	--	48	--	--	--
14...	0200	--	--	--	61	7.1	8.0	--
14...	0400	--	--	--	60	7.1	8.0	--
14...	0600	--	14	--	63	7.1	8.0	11.3
14...	0800	--	--	--	64	7.2	7.5	--
14...	0940	27	--	--	46	--	7.5	--
14...	1000	--	13	--	72	--	7.5	11.7
19...	C1200	13	--	--	34	--	--	--
19...	C1500	50	--	--	38	--	--	--
27...	1200	--	--	--	58	--	10.0	--
27...	1220	--	15	--	--	6.6	10.0	11.5
MAR.								
24...	1215	25	--	--	46	--	--	--
24...	C2400	50	--	--	32	--	--	--
APR.								
09...	1100	--	15	--	--	5.8	7.5	12.5
09...	1130	3.4	--	--	48	--	7.5	--
MAY								
14...	1230	2.3	17	55	6.2	11.0	10.4	
31...	1130	.98	24	63	7.5	12.0	10.0	
31...	1150	.98	19	65	7.5	12.0	--	
JUNE								
06...	1300	.90	21	64	7.1	12.0	--	
06...	1330	--	22	--	7.1	12.0	10.5	
SEP.								
21...	1245	--	29	86	6.8	12.0	10.4	
			11482270	BOND CREEK NEAR ORICK				
MAY,	1974							
08...	1615	3.3	11	43	7.2	11.5	--	
08...	1640	3.3	--	41	--	11.5	--	
08...	1700	--	10	--	6.3	11.5	11.0	
AUG.								
09...	1530	--	--	49	--	14.5	--	
DEC.								
21...	1100	6.3	--	47	--	--	--	
JAN.,	1975							
10...	1225	18	--	42	--	9.0	--	
FEB.								
11...	1200	12	--	44	--	9.0	--	
19...	C1200	32	--	32	--	--	--	
24...	1315	14	--	40	--	9.5	--	
26...	1235	11	8	41	6.4	9.0	11.5	
MAR.								
18...	C1200	32	--	30	--	--	--	
18...	C1300	90	--	27	--	--	--	
25...	1245	40	--	34	--	9.0	--	
APR.								
09...	1200	7.7	--	37	--	8.5	--	
MAY								
14...	1315	--	11	--	6.3	11.0	10.8	
14...	1330	4.3	--	44	--	11.0	--	
AUG.								
12...	1100	--	--	59	--	12.0	10.4	

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (FT ³ /S)	ALKA- LINITY CACO ₃ (MG/L)	SPF- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)						
11482280 CLOQUET CREEK NEAR ORICK													
MAY , 1974													
09...	0810	.65	--	56	--	9.0	--						
09...	0830	--	20	--	7.3	9.0	11.7						
14...	1700	--	--	60	6.9	9.0	11.4						
AUG.													
09...	1600	--	--	77	--	16.0	--						
SEP.													
21...	1130	.03	31	96	7.1	12.0	10.2						
JAN., 1975													
10...	1250	27	--	46	--	9.5	--						
FEB.													
11...	1230	22	--	49	--	9.5	--						
19...	1200	66	--	38	--	9.0	--						
26...	1340	4.5	14	51	6.8	8.5	11.7						
MAR.													
27...	1305	--	--	43	--	8.0	--						
MAY													
14...	1345	--	12	--	6.1	11.0	10.7						
14...	1355	--	--	58	--	11.0	--						
29...	1240	--	20	60	7.1	12.0	10.3						
AUG.													
12...	1330	--	--	81	--	12.5	10.1						
SEP.													
19...	1200	--	26	86	6.2	12.0	7.6						
11482290 OSCAR LARSON CREEK NEAR ORICK													
MAY , 1974													
09...	1035	.43	31	--	7.6	9.5	11.7						
09...	1055	.43	--	80	--	9.5	--						
JAN., 1975													
10...	1425	17	--	53	--	9.5	--						
FEB.													
11...	1310	12	--	62	--	9.0	--						
19...	C1000	80	--	49	--	--	--						
19...	1300	27	--	49	--	9.0	--						
26...	1420	2.0	--	66	--	--	--						
26...	1430	--	21	--	6.4	8.5	11.7						
MAR.													
27...	1400	2.0	--	53	--	8.0	--						
MAY													
14...	1430	1.0	23	77	6.7	10.0	10.7						
11482295 GANS SOUTH CREEK NEAR ORICK													
JAN., 1975													
07...	C1800	20	--	54	--	--	--						
10...	1500	13	--	50	--	9.5	--						
FEB.													
11...	1345	9.0	--	53	--	9.0	--						
19...	1345	A23	--	44	--	9.0	--						
26...	1515	A 2.0	15	52	6.6	9.0	11.6						
MAR.													
27...	1430	1.1	--	45	--	8.0	--						
MAY													
16...	1125	A.69	--	53	--	10.0	--						
16...	1130	--	17	--	7.1	10.0	11.3						

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (FT ³ /S)	ALKALI- LINITY AS CACO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)
11482300 ELAM CREEK NEAR ORICK							
MAY, 1974							
09...	1240	3.9	--	44	--	11.0	--
09...	1245	--	11	--	6.8	11.0	10.8
09...	1310	3.9	11	47	6.9	11.0	--
15...	1145	--	13	55	7.0	10.0	11.0
AUG.							
10...	1430	--	--	52	--	16.0	--
SEP.							
21...	1445	1.0	15	65	6.9	13.0	10.2
DEC.							
14...	C1200	--	--	60	--	--	--
21...	1205	13	--	45	--	9.5	--
JAN., 1975							
10...	1550	34	--	42	--	9.5	--
28...	1140	2.6	--	48	--	5.0	--
FEB.							
11...	1400	--	--	43	--	9.0	--
19...	C1200	115	--	33	--	--	--
19...	1500	80	--	37	--	9.0	--
27...	1400	--	12	--	5.4	10.0	10.9
27...	1425	12	--	47	--	10.0	--
MAR.							
27...	1455	--	--	38	--	10.0	--
APR.							
09...	1350	--	--	43	--	8.0	--
MAY							
16...	1215	--	12	49	6.8	11.5	10.2
29...	1450	--	15	51	7.2	14.0	9.8
SEP.							
19...	1330	--	15	73	6.6	12.0	9.5
11482305 GANS WEST CREEK NEAR ORICK							
JAN., 1975							
10...	1615	A4.6	--	48	--	9.0	--
FEB.							
11...	1415	2.1	--	51	--	--	--
19...	1600	A10	--	39	--	8.5	--
26...	1605	.88	--	51	--	8.5	--
26...	1625	--	11	--	6.9	8.5	11.7
MAR.							
27...	1525	2.3	--	44	--	8.0	--
MAY							
16...	1300	.44	14	51	7.2	10.0	10.9
11482310 MCARTHUR CREEK NEAR ORICK							
MAY, 1974							
09...	1435	--	--	52	--	11.0	--
09...	1440	6.7	12	58	7.1	11.0	11.1
AUG.							
10...	1210	--	--	58	--	13.5	--
NOV.							
18...	1145	3.1	--	68	--	9.0	--
DEC.							
14...	C1200	29	--	62	--	--	--
21...	1250	16	--	56	--	9.0	--

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (FT ³ /S)	ALKA- LINITY CACO ₃ (MG/L)	SPF- CIFIC CON- DUCT- ANCE (MICRO- MHO/S)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)
11482310 MCARTHUR CREEK NEAR ORICK--CONTINUED							
JAN., 1975							
10...	1645	35	--	50	--	9.0	--
FEB.							
11...	1425	25	--	48	--	--	--
19...	1625	200	--	42	--	9.0	--
27...	1450	--	14	--	5.4	10.0	11.5
27...	1515	22	--	51	--	10.0	--
MAR.							
27...	1545	47	--	47	--	9.0	--
APR.							
09...	1525	16	--	48	--	9.0	--
MAY							
16...	1330	9.1	10	53	7.0	10.5	10.8
11482320 LOW-SLOPE SCHIST CREEK NEAR ORICK							
MAY, 1974							
10...	0930	.33	5	44	6.6	9.0	11.7
10...	0940	.33	--	47	--	9.0	--
NOV.							
18...	1350	.03	--	59	--	--	--
JAN., 1975							
10...	1700	1.3	--	50	--	8.5	--
FEB.							
11...	1450	.80	--	50	--	9.0	--
18...	1300	--	14	--	6.7	8.0	11.7
27...	1540	.80	--	47	--	9.5	--
27...	1545	--	3	--	4.7	9.5	11.6
MAR.							
18...	1200	25	--	38	--	--	--
27...	1600	.30	--	42	--	8.0	--
APR.							
09...	1615	A.62	--	44	--	--	--
MAY							
16...	1415	.32	8	46	6.9	9.5	11.2
11482330 HAYES CREEK NEAR ORICK							
MAY, 1974							
15...	1530	--	22	81	6.9	9.5	11.2
JULY							
19...	1150	--	--	98	--	13.0	--
27...	1405	.03	--	101	--	--	--
27...	1430	.03	34	115	7.1	15.0	10.2
AUG.							
10...	1110	.20	--	111	--	13.0	--
SEP.							
14...	1400	--	45	148	7.2	12.5	9.5
OCT.							
28...	1230	.10	--	134	--	--	--

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (FT ³ /S)	ALKA- LINITY AS CACO ₃ (MG/L)	SPE- CIFIC DUCT- ANCE (MICRO- MHOES) (UNITS)	PH	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)
11482330 HAYES CREEK NEAR ORICK--CONTINUED							
NOV., 1974							
07...	0615	--	35	140	6.8	10.0	9.7
07...	0700	--	--	--	6.9	10.0	--
07...	0800	A.05	37	140	7.2	10.0	10.2
07...	0900	A.07	37	150	6.9	10.0	--
07...	1000	A.19	33	170	7.3	10.0	--
07...	1100	A.22	34	160	7.3	10.0	--
07...	1200	A.21	34	140	7.3	10.0	10.5
07...	1300	A.20	32	120	7.2	10.0	--
07...	1400	A.18	31	120	7.2	10.0	--
07...	1500	A.16	32	120	7.2	10.0	--
07...	1615	A.13	32	120	7.2	10.0	10.7
07...	1910	A.09	31	115	7.2	10.0	--
07...	2200	A.03	32	120	7.4	9.0	10.6
08...	0730	.01	32	140	7.2	9.0	10.8
20...	1815	--	37	178	7.3	10.0	11.4
21...	0300	--	36	130	7.3	10.0	10.1
21...	0400	--	--	152	7.2	10.0	--
21...	0500	--	35	120	7.3	10.0	--
21...	0600	--	--	122	7.2	10.0	--
21...	0715	--	36	128	7.3	10.5	10.3
21...	0800	--	--	122	7.3	10.0	--
21...	0900	--	34	120	7.4	10.0	--
21...	1000	--	--	122	7.3	10.5	--
21...	1100	--	36	120	7.4	10.5	10.3
21...	1200	--	--	113	7.2	11.0	--
21...	1300	--	34	112	7.2	10.5	--
21...	1305	.01	--	113	--	10.5	--
21...	1400	--	28	123	6.7	10.0	--
21...	1500	--	26	142	6.4	9.5	11.2
21...	1600	--	--	137	6.5	9.5	--
21...	1640	.97	--	132	--	9.5	--
21...	1700	.94	20	126	7.0	9.5	--
21...	1800	.75	--	139	6.9	9.5	--
21...	1900	--	20	148	7.0	9.5	11.9
21...	2015	.51	--	155	7.0	9.0	--
21...	2100	--	21	175	7.1	9.0	--
22...	0100	--	22	185	7.1	9.0	10.7
22...	0215	--	--	198	7.1	9.0	--
22...	0300	--	22	191	7.1	8.5	--
22...	0400	--	22	188	7.1	8.5	10.4
22...	0420	.25	--	100	--	8.5	--
22...	0500	--	--	195	7.1	8.5	--
22...	0600	--	--	175	7.1	9.0	--
22...	0700	--	24	131	7.1	9.0	11.2
DEC.							
21...	1730	19	--	66	--	9.0	--
JAN., 1975							
17...	1530	2.0	--	58	--	9.0	--
FER.							
05...	1450	--	14	67	6.5	8.0	11.9
05...	1500	--	--	67	7.0	8.0	--
05...	1505	6.1	--	69	--	8.0	--
05...	1800	--	--	75	6.7	8.0	--
05...	1900	--	--	82	6.8	8.0	--
05...	2000	--	14	77	7.1	8.0	11.7
05...	2200	--	--	77	7.0	8.0	--
05...	2400	--	--	77	7.0	8.0	--

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (FT ² /S)	ALKA- LINITY CACO ₃ (MG/L)	DUCT- AS (MICRO- MHOS)	SPF- CIFIC CON- ANCE (UNITS)	PH	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)					
11482330 HAYES CREEK NEAR ORICK--CONTINUED													
FEB., 1975													
06...	0200	--	14	76	6.6	8.5	11.8						
06...	0400	--	--	82	6.8	8.0	--						
06...	0600	--	--	76	7.0	8.5	--						
06...	0700	--	--	77	6.8	8.0	--						
06...	0800	--	--	76	7.2	8.5	--						
06...	0830	--	14	--	--	--	11.7						
06...	0900	--	--	75	7.2	8.5	--						
06...	1000	--	--	74	7.3	8.5	--						
06...	1100	--	--	80	7.3	9.0	--						
06...	1200	--	--	79	7.3	8.5	--						
06...	1300	--	--	74	7.3	9.0	--						
06...	1400	--	14	74	7.3	9.0	11.3						
06...	1500	--	--	75	7.3	9.0	--						
06...	1600	--	--	78	7.2	9.0	--						
06...	1830	--	--	75	7.2	9.0	--						
06...	2000	--	14	75	7.2	9.0	11.4						
06...	2115	4.4	--	61	--	9.0	--						
06...	2200	--	--	75	6.7	9.0	--						
06...	2400	--	--	80	6.8	9.0	--						
07...	0200	--	14	80	7.0	9.0	11.3						
07...	0400	--	--	80	6.8	9.0	--						
07...	0600	--	--	79	6.9	8.5	--						
07...	0800	--	14	80	6.9	9.0	10.9						
07...	0900	--	--	75	6.9	9.0	--						
08...	1000	--	15	83	7.4	9.0	11.1						
08...	2000	--	15	82	7.4	9.5	11.0						
08...	2100	--	--	79	7.2	9.5	--						
08...	2200	--	--	79	7.2	9.5	--						
08...	2400	--	14	79	7.2	9.5	10.8						
09...	0100	--	--	83	6.9	9.0	--						
09...	0200	--	--	81	6.7	9.0	--						
09...	0300	--	--	81	6.8	9.0	--						
09...	0400	--	13	80	6.8	9.5	10.7						
09...	0500	--	--	80	6.8	9.5	--						
09...	0630	--	--	86	6.9	9.0	--						
09...	0800	--	14	80	7.0	9.0	11.0						
09...	0900	--	14	83	7.0	9.0	--						
09...	1000	--	13	80	7.0	9.0	11.0						
12...	1315	--	--	73	--	10.0	--						
12...	1405	--	--	80	--	9.5	--						
12...	1530	--	--	79	--	9.5	--						
12...	1600	--	12	80	6.7	9.5	11.0						
12...	1700	--	--	70	6.4	10.0	--						
12...	1800	--	--	70	6.5	10.0	--						
12...	1900	--	--	72	6.5	10.0	--						
12...	2000	--	13	70	6.7	10.0	10.7						
12...	2100	--	--	72	6.7	10.0	--						
12...	2200	--	--	70	6.8	10.0	--						
12...	2300	--	--	70	6.8	10.0	--						

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (FT ³ /S)	ALKA- LINITY AS CACO ₃ (MG/L)	SPF- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)						
11482330 HAYES CREEK NEAR ORICK--CONTINUED													
FEB., 1975													
12...	2400	--	13	70	6.8	10.0	11.1						
13...	0200	--	--	73	6.8	9.5	--						
13...	0300	--	--	74	6.8	9.5	--						
13...	0400	--	14	73	6.9	9.5	--						
13...	0500	--	--	73	6.9	9.5	--						
13...	0600	--	--	73	6.8	9.5	--						
13...	0700	--	--	82	6.9	9.5	--						
13...	0800	--	14	82	6.8	9.5	11.2						
13...	0900	--	--	82	6.8	9.5	--						
13...	1000	--	--	82	6.8	9.5	--						
13...	1100	--	--	83	6.8	9.0	--						
13...	1200	--	12	83	6.8	9.0	11.1						
13...	1315	--	--	83	6.8	9.0	--						
13...	1400	--	--	80	6.8	9.0	--						
13...	1500	--	--	83	6.8	9.0	--						
13...	1600	--	13	83	6.8	9.0	11.6						
13...	1705	--	--	84	6.8	9.0	--						
13...	1910	--	--	86	6.8	9.0	--						
13...	2000	--	12	86	6.8	9.0	11.6						
13...	2100	--	--	86	6.8	9.0	--						
13...	2200	--	--	86	6.9	9.0	--						
13...	2300	--	--	88	6.9	8.5	--						
13...	2400	--	12	85	6.8	8.5	11.8						
14...	0100	7.5	--	87	6.8	8.5	--						
14...	0200	--	--	88	6.8	8.0	--						
14...	0300	--	--	88	6.9	8.0	--						
14...	0400	--	13	88	6.9	8.0	11.4						
14...	0500	--	--	86	6.8	8.0	--						
14...	0600	--	--	88	7.0	8.0	--						
14...	0700	--	--	85	6.9	8.0	--						
14...	0800	--	13	86	6.9	8.0	11.9						
14...	0900	--	12	86	6.8	8.0	11.9						
14...	1000	7.0	12	86	6.8	8.0	11.8						
19...	1430	29	--	48	--	9.5	--						
25...	1030	2.7	--	55	--	8.5	--						
MAR.													
11...	1030	--	13	--	6.0	8.0	--						
11...	1100	6.5	--	60	--	8.0	--						
24...	1530	8.9	--	50	--	9.0	--						
25...	1020	21	--	50	--	--	--						
APR., 1975													
04...	1330	--	11	--	7.7	7.0	12.8						
04...	1345	2.3	--	57	--	7.0	--						
MAY													
02...	1350	1.4	--	66	--	9.5	--						
02...	1355	--	16	--	6.6	9.5	10.8						
29...	1640	--	26	77	7.6	12.0	10.8						
SEP.													
19...	1615	--	40	133	7.2	12.0	9.4						

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	INSTANTANEOUS DISCHARGE (FT ³ /S)	ALKALINITY CACO ₃ (MG/L)	DUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	SPE- CIFIC CON-	DIS- SOLVED OXYGEN (MG/L)							
							C								
11482450 LOST MAN CREEK NEAR ORICK															
MAY, 1974															
JULY															
10...	1305	--	23	60	7.1	11.5	10.4								
18...	1200	--	--	--	--	14.5	9.1								
18...	1230	--	32	55	7.0	--	--								
18...	1300	--	--	60	--	14.5	--								
18...	1400	--	32	66	--	14.5	8.9								
18...	1500	.59	--	67	--	14.5	--								
18...	1600	--	31	67	6.9	14.5	8.8								
18...	1700	.64	--	68	--	14.5	--								
18...	1800	--	--	69	6.8	14.5	8.8								
18...	1900	.63	--	69	--	14.5	--								
18...	2000	--	31	64	6.8	14.0	8.9								
18...	2100	--	--	70	--	14.0	--								
18...	2200	.72	31	71	6.8	14.0	8.9								
18...	2300	--	--	70	--	14.0	--								
18...	2400	--	31	71	6.9	14.0	8.6								
19...	0100	--	--	71	--	14.0	--								
19...	0200	--	33	60	6.8	14.0	9.0								
19...	0400	--	32	74	6.9	14.0	9.0								
19...	0500	--	--	70	--	14.0	--								
19...	0600	.75	31	70	6.9	13.5	9.2								
19...	0700	--	--	69	--	14.0	--								
19...	0800	--	31	70	6.8	14.0	9.1								
19...	0900	--	--	71	--	14.0	--								
19...	1115	--	31	--	6.8	14.5	9.2								
19...	1210	.81	31	78	6.8	14.5	9.2								
19...	1230	.81	31	72	6.9	14.5	--								
22...	1230	.56	33	85	7.3	14.5	9.0								
22...	1320	.56	--	81	--	--	--								
22...	1330	.56	32	84	7.3	14.5	--								
Sept.															
10...	1200	--	--	70	--	15.5	--								
10...	1245	--	47	87	6.8	15.5	8.7								
10...	1400	.21	49	90	6.9	15.5	8.3								
10...	1500	--	48	87	7.0	16.0	8.3								
10...	1600	--	48	90	6.8	15.5	7.8								
10...	1730	.23	48	90	6.9	15.0	8.3								
10...	1815	--	47	87	6.9	14.5	8.2								
10...	1900	--	--	87	6.9	14.5	--								
10...	2000	--	49	91	7.0	14.5	8.2								
10...	2100	--	49	85	7.0	15.0	8.4								
10...	2200	--	49	84	7.0	14.5	8.4								
10...	2300	--	49	85	7.0	14.0	8.4								
10...	2400	.25	50	82	7.0	14.0	8.3								
11...	0100	--	49	82	7.0	14.0	8.4								
11...	0200	--	49	88	7.0	14.0	8.4								
11...	0300	--	48	89	7.0	14.0	8.4								
11...	0420	.25	49	88	7.0	14.0	8.4								
11...	0500	--	48	88	7.0	14.0	8.4								
11...	0600	--	49	87	7.0	13.5	8.5								
11...	0700	--	49	85	7.0	13.5	8.5								
11...	0815	--	48	96	7.0	13.0	8.5								
11...	0930	--	47	87	7.0	13.5	8.6								
11...	1130	--	48	89	6.9	14.5	8.5								
11...	1200	.21	47	89	6.9	14.5	--								
11...	1300	.21	48	92	7.0	16.5	8.3								
15...	1030	.22	49	133	7.1	14.0	8.3								
15...	1100	.22	48	132	7.1	14.0	--								
OCT.															
24...	1200	--	--	96	--	--	--								

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	INSTANTANEOUS DISCHARGE (FT ³ /S)	ALKALINITY CACO ₃ (MG/L)	SPECIFIC DUCTANCE (MICROMHOS)	CONCENTRATION PH (UNITS)	TEMPERATURE (DEG C)	SOLVED OXYGEN (MG/L)
							SPECIFIC DUCTANCE (MICROMHOS)
11482450 LOST MAN CREEK NEAR ORICK--CONTINUED							
NOV., 1974							
06...	2130	.34	39	46	6.8	11.5	9.0
06...	2315	--	41	95	6.9	11.0	9.2
07...	0100	--	--	110	--	11.0	--
07...	0310	.38	--	110	--	--	--
07...	0400	--	41	96	6.8	11.0	9.0
07...	0500	--	--	110	--	11.0	--
07...	0600	--	39	96	6.8	11.0	--
07...	0645	.42	--	109	--	11.0	--
07...	0800	--	38	112	6.8	11.0	8.9
07...	0900	.44	--	111	--	--	--
07...	0930	--	39	--	6.8	--	9.1
07...	1100	--	--	118	--	11.0	--
07...	1200	--	40	120	6.9	11.0	9.0
07...	1300	--	--	116	--	11.0	--
07...	1340	.74	--	110	--	11.0	--
07...	1515	--	39	115	6.7	11.5	9.4
07...	1600	--	--	116	--	11.0	--
07...	1700	--	38	114	6.7	10.5	9.4
07...	1730	--	--	110	--	11.0	--
07...	1800	--	--	110	--	11.0	--
07...	1810	2.0	--	108	--	11.0	--
07...	1930	--	36	114	6.8	11.0	9.6
07...	2000	--	--	115	--	11.0	--
07...	2030	--	--	112	--	11.0	--
07...	2200	2.9	34	106	6.7	11.0	9.9
07...	2230	--	--	107	--	11.0	--
08...	0410	--	32	116	6.7	10.0	9.9
08...	0800	2.1	31	97	6.6	10.5	10.2
20...	1400	--	29	99	6.8	9.5	--
20...	1930	A.63	--	89	--	10.0	--
20...	2000	--	31	89	7.0	10.0	10.0
21...	0800	.52	32	92	6.8	10.0	9.9
21...	1000	--	32	94	6.8	10.0	--
21...	1200	.60	31	90	6.8	10.0	9.6
21...	1300	2.6	--	90	--	--	--
21...	1400	.70	29	99	6.8	9.5	--
21...	1500	.80	--	93	--	10.0	--
21...	1600	1.8	29	90	6.8	10.0	--
21...	1700	3.2	--	145	--	10.0	--
21...	1800	4.6	34	120	6.8	10.5	10.1
21...	1900	18	--	113	--	10.0	--
21...	1930	--	--	107	--	--	--
21...	2000	21	28	103	6.9	10.0	--
21...	2100	17	--	93	--	10.0	--
21...	2200	16	25	87	6.9	9.5	--
21...	2300	15	--	90	--	9.5	--
21...	2400	13	25	93	6.9	9.5	10.8
22...	0100	11	--	87	--	9.5	--
22...	0200	10	24	89	6.9	9.5	--
22...	0300	8.8	--	86	--	9.5	--
22...	0400	A7.8	24	--	6.9	9.5	--
22...	0600	6.6	24	86	6.9	9.5	10.3
22...	0800	--	24	84	6.9	9.5	--
22...	1000	5.0	24	83	6.9	9.5	10.9
DEC.							
17...	1300	A31	12	45	6.1	9.0	10.9

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	INSTAN- TANOUS DIS- CHARGE (CFT/S)	ALKA- LINITY CACO ₃ (MG/L)	SPE- CIFIC DUCT- ANCE (MICRO- Mhos)	PH (UNITS)	TEMPER- ATURE (DEG C)	DTS- SOLVED OXYGEN (MG/L)
							COM-
11482450 LOST MAN CREEK NEAR ORICK--CONTINUED							
JAN., 1975							
16...	1600	A13	36	56	7.7	8.0	11.6
FEB.							
05...	1445	--	12	45	7.0	6.5	11.8
05...	1745	54	--	39	--	6.5	--
05...	2000	--	12	42	7.2	6.5	11.9
06...	0040	54	--	39	--	--	--
06...	0350	--	--	45	--	7.0	--
06...	0200	--	12	44	7.2	6.5	12.0
06...	0300	--	--	44	--	6.5	--
06...	0430	--	--	42	--	6.5	--
06...	0545	--	--	42	--	6.5	--
06...	0630	--	12	42	7.2	6.5	11.9
06...	0730	--	--	44	--	6.5	--
06...	0830	--	--	45	--	7.0	--
06...	0930	--	--	43	--	7.0	--
06...	1030	50	12	40	7.8	7.5	11.1
06...	1130	--	--	41	--	7.5	--
06...	1230	--	--	43	--	7.5	--
06...	1330	--	--	42	--	8.0	--
06...	1430	--	11	42	7.1	8.0	11.3
06...	1600	--	--	43	--	7.5	--
06...	1630	--	--	37	--	8.0	--
06...	1700	--	--	40	--	8.0	--
06...	1800	--	13	37	7.4	8.0	11.6
06...	1900	--	--	39	--	8.0	--
06...	2000	--	--	39	--	8.0	--
06...	2100	--	--	43	--	7.5	--
06...	2200	--	11	36	7.2	8.0	11.8
06...	2300	--	--	40	--	8.0	--
07...	0100	--	--	40	--	8.0	--
07...	0300	--	13	40	7.2	8.0	11.8
07...	0530	--	12	43	7.2	7.5	11.6
07...	0730	--	--	41	--	7.5	--
08...	1500	--	13	41	7.1	9.0	12.0
08...	1630	31	--	38	--	8.0	--
08...	1900	--	13	44	7.1	9.0	11.6
08...	2000	--	--	43	--	9.0	--
08...	2100	--	--	43	--	8.0	--
09...	2145	40	--	38	--	8.0	--
09...	2200	--	--	43	--	8.0	--
09...	2300	--	12	42	7.2	9.0	11.6
09...	2400	--	--	42	--	9.0	--
09...	0100	--	--	43	--	8.0	--
09...	0200	--	--	36	--	8.0	--
09...	0230	62	--	35	--	9.0	--
09...	0300	--	--	37	--	8.0	--
09...	0400	--	12	37	7.1	8.5	11.5
09...	0500	--	--	39	--	8.0	--
09...	0600	--	--	37	--	8.0	--
09...	0700	--	--	39	--	8.0	--
12...	1245	76	--	36	--	8.0	--
12...	1300	--	13	37	7.2	8.5	11.2
12...	1400	--	--	39	7.1	9.0	--
12...	1515	--	--	39	7.3	9.0	--
12...	1610	--	--	39	7.3	9.0	--
12...	1700	--	12	37	7.3	8.5	10.5
12...	1800	--	--	36	7.3	8.0	--
12...	1420	77	--	36	--	8.0	--
12...	2100	--	12	33	7.3	9.0	10.6
12...	2230	85	--	35	7.3	9.0	--
12...	2300	92	--	34	7.3	9.0	--

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (CF ³ /S)	ALKALI- LINITY AS CACO ₃ (MG/L)	CON- DUCT- ANCE (MICRO- MHO/S)	SPE- CIFIC CON-	PH	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)
					C			
11482450 LOST MAN CREEK NEAR ORICK--CONTINUED								
FEB., 1975								
13...	0005	--	12	34	7.3	8.5	11.2	
13...	0025	94	--	36	--	8.5	--	
13...	0100	--	--	34	7.2	8.0	--	
13...	0200	--	--	36	7.1	9.0	--	
13...	0300	92	--	39	7.3	9.0	--	
13...	0400	--	12	36	7.2	9.0	11.3	
13...	0430	96	--	36	--	9.0	--	
13...	0500	--	--	36	7.2	9.0	--	
13...	0600	--	--	37	7.3	8.5	--	
13...	0700	--	--	37	--	8.5	--	
13...	0735	105	--	35	--	8.5	--	
13...	0800	--	12	37	7.2	8.0	11.3	
13...	0900	--	--	37	7.3	8.5	--	
13...	1000	--	--	35	7.3	8.5	--	
13...	1100	--	--	37	7.3	8.5	--	
13...	1130	121	--	35	--	8.5	--	
13...	1200	--	12	37	7.2	8.5	11.2	
13...	1300	--	--	37	7.2	8.5	--	
13...	1400	--	--	38	7.3	7.5	--	
13...	1500	--	--	38	7.3	7.5	--	
13...	1515	114	--	35	--	7.5	--	
13...	1600	--	12	38	7.3	7.5	12.0	
13...	1700	--	--	38	7.2	7.5	--	
13...	1800	--	--	34	7.2	8.0	--	
13...	1900	--	--	33	7.2	7.5	--	
13...	2000	--	--	35	7.3	7.5	--	
13...	2100	--	--	33	7.3	8.0	--	
14...	0015	--	--	36	--	7.5	--	
14...	0100	--	11	35	7.4	7.5	11.7	
14...	0200	--	--	36	--	7.5	--	
14...	0300	--	--	37	--	7.0	--	
14...	0400	--	--	38	--	7.0	--	
14...	0500	--	11	38	7.3	7.0	11.3	
14...	0600	--	--	36	--	6.5	--	
14...	0730	--	--	34	--	7.0	--	
14...	0755	81	--	35	--	7.0	--	
25...	1300	13	--	38	--	8.0	--	
MAR.								
01...	1800	11	--	44	--	9.0	--	
11...	1245	--	11	--	6.6	8.5	11.2	
11...	1330	18	--	40	--	8.5	--	
18...	1130	1000	--	26	--	8.0	--	
20...	1425	90	--	32	--	7.5	--	
21...	1400	195	--	31	--	--	--	
APR.								
03...	1415	--	12	--	6.7	6.5	12.2	
03...	1445	19	--	38	--	6.5	--	
MAY								
05...	1045	19	12	44	6.7	8.0	10.4	
JUNE								
02...	1130	3.1	21	58	6.9	12.0	10.1	
08...	1200	2.5	19	61	6.9	12.0	9.9	
SEPT.								
17...	1100	--	40	104	6.7	14.0	8.8	

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (FT ³ /S)	ALKALI- LINITY (MG/L)	CACO ₃ (MG/L)	DUCT- ANCE (MICRO- MHOS)	SPE- CIFIC CON-	PH	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)
						DUCT-			
11482455 LOST MAN CREEK TRIBUTARY NEAR ORICK									
DEC., 1974									
17...	1425	--	11	--	5.9	9.5	10.9		
17...	1500	3.4	--	45	--	9.5	--		
JAN., 1975									
13...	1220	--	12	47	7.5	8.5	11.8		
13...	1300	1.7	--	39	--	8.5	--		
FEB.									
09...	C2400	--	--	41	--	--	--		
11...	1525	3.9	--	40	--	9.0	--		
25...	1300	1.6	--	39	--	8.5	--		
MAR.									
11...	1445	1.9	--	41	--	8.0	--		
28...	1330	1.4	--	35	--	7.5	--		
APR.									
08...	1340	1.3	--	39	--	7.5	--		
MAY									
05...	1220	.91	7	39	6.4	8.0	11.5		
11482460 LARRY DAMM CREEK NEAR ORICK									
JULY, 1974									
27...	1030	.58	37	90	7.1	16.0	8.8		
27...	1140	.58	--	82	--	--	--		
OCT.									
28...	1145	4.7	--	91	--	--	--		
DEC.									
14...	C1200	46	--	46	--	--	--		
18...	1030	7.4	--	50	--	9.0	--		
JAN., 1975									
13...	1100	--	20	--	6.8	9.0	11.3		
13...	1140	11	--	45	--	9.0	--		
FEB.									
11...	1550	44	--	49	--	10.5	--		
19...	C1200	46	--	34	--	--	--		
25...	1215	7.4	--	56	--	8.0	--		
MAR.									
06...	1415	7.0	--	59	--	10.0	--		
18...	1230	265	--	29	--	10.5	--		
28...	1500	11	--	48	--	10.0	--		
APR.									
08...	1200	7.6	--	50	--	--	--		
MAY									
05...	1325	5.0	18	57	6.5	10.5	11.7		
SEP.									
17...	1500	--	29	80	6.5	14.0	--		

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (FT ³ /S)	ALKA- LINITY CACO ₃ (MG/L)	CON- CENTR- (MICRO- MHOS)	SPE- CIFIC COND. PH	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)
					DICT- ANCE (UNITS)	ATURE (DEG C)	OXYGEN (MG/L)
11482468 LITTLE LOST MAN CREEK AT SITE NO. 2, NEAR ORICK							
FEB., 1974							
G10...	1500	--	13	40	6.4	7.0	11.8
G10...	1600	--	--	48	--	7.0	--
G22...	1110	--	--	44	--	7.0	--
MAR.							
G28...	1530	--	--	50	--	--	--
G29...	1345	--	--	40	--	--	--
G29...	1935	149	--	35	--	9.0	--
MAY							
.10...	1515	--	--	59	--	11.0	9.3
JULY							
03...	1230	.63	--	82	--	15.5	--
04...	1600	--	--	64	--	--	--
18...	1150	--	--	62	--	13.5	--
18...	1230	--	--	--	7.6	--	10.3
18...	1320	.40	--	65	--	--	--
18...	1350	.40	--	--	7.4	--	--
18...	1405	.40	--	64	--	14.0	9.9
18...	1555	.40	--	74	--	14.0	--
18...	1615	.40	--	--	7.5	--	--
18...	1625	.40	--	--	--	14.0	10.3
18...	1820	.40	--	--	7.4	13.5	10.0
18...	1920	.40	--	--	7.4	--	--
18...	1945	.40	--	61	--	13.5	9.8
18...	2050	.40	--	82	--	13.0	--
18...	2115	.40	--	--	7.1	--	--
18...	2145	.40	--	85	--	13.0	9.3
18...	2315	.40	--	88	--	13.0	--
18...	2330	.40	--	--	6.9	13.0	10.0
18...	2350	.40	--	77	--	13.0	--
19...	0100	.44	--	79	7.0	13.0	10.3
19...	0340	.44	--	--	6.8	--	--
19...	0355	.44	--	--	--	13.0	9.8
19...	0405	.44	--	82	--	13.0	--
19...	0615	.44	--	86	--	13.0	--
19...	0635	.44	--	--	6.5	--	9.5
19...	0710	.44	--	82	--	13.0	--
19...	0725	.44	--	--	--	13.0	9.9
19...	0820	.44	--	77	--	13.0	--
19...	0920	.44	--	79	--	13.0	--
19...	0940	.44	--	--	7.2	13.0	10.3
19...	1000	.44	25	81	--	13.0	--
19...	1115	.44	--	--	--	13.0	10.2
19...	1130	.44	--	--	7.3	--	--
19...	1210	--	--	--	--	14.5	10.0
19...	1225	.45	--	67	--	--	--
22...	1230	A.41	23	72	7.5	15.0	10.2
22...	1300	.41	23	65	7.5	15.0	--
AUG.							
09...	1600	A.33	--	73	--	16.0	--
13...	1630	--	--	72	--	13.0	--
13...	1655	--	--	73	--	14.0	--
SEP.							
10...	1200	--	--	--	--	15.0	10.4
10...	1315	.13	--	76	--	16.0	--
10...	1700	--	--	70	--	14.5	9.7
10...	1740	--	--	--	7.2	14.5	--
10...	1900	--	--	76	7.3	14.0	9.8
10...	2000	--	--	76	--	14.0	--
10...	2100	--	26	75	7.2	13.5	9.6
10...	2150	--	--	--	7.2	--	--
10...	2315	--	--	75	7.1	13.0	9.8

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (FT ³ /S)	ALKALI- LINITY CACO ₃ (MG/L)	SPECI- FIC CON- DUCT- ANCE (MICRO- MHO/S)	PH (UNITS)	TEMPER- ATURE (DEG C)	SOLVED OXYGEN (MG/L)
							DIS-SPECIFIC CON-DUCT-ANCE PH TEMPER- ATURE SOLVED OXYGEN
11482468 LITTLE LOST MAN CREEK AT SITE NO. 2, NEAR ORICK--CONTINUED							
SEPT., 1974							
11...	0100	.32	25	77	7.2	12.5	9.8
11...	0200	--	--	77	7.1	12.5	--
11...	0300	--	26	77	7.1	12.0	9.7
11...	0400	--	--	74	7.2	12.0	--
11...	0500	--	25	75	7.2	12.0	10.0
11...	0600	--	--	76	7.2	12.0	--
11...	0630	--	--	74	7.2	12.0	10.1
11...	0735	--	--	72	7.2	11.5	10.0
11...	0900	--	25	76	7.2	11.5	10.4
11...	1000	.32	--	74	7.2	12.0	10.2
11...	1055	--	25	76	7.2	12.0	10.2
11...	1200	.31	21	78	7.6	15.0	10.4
15...	1320	A.21	27	83	7.7	14.5	10.4
15...	1340	.20	--	70	--	14.5	--
15...	1400	.20	25	83	7.7	14.5	--
OCT.							
29...	1105	3.4	--	77	--	--	--
NOV.							
06...	2020	.16	--	76	--	--	--
06...	2040	--	26	74	7.8	9.0	10.9
06...	2200	--	26	74	7.8	9.0	--
07...	0410	.17	25	78	7.5	9.0	10.8
07...	0530	--	23	71	7.5	9.0	--
07...	0535	.29	23	75	--	--	--
07...	0630	--	23	71	7.6	9.0	--
07...	0635	.41	23	75	--	--	--
07...	0640	.44	--	71	--	9.0	--
07...	0730	--	23	71	7.8	9.0	--
07...	0735	.56	23	78	--	--	--
07...	0830	--	24	70	7.9	9.5	--
07...	0835	.74	23	78	--	9.5	--
07...	0930	--	23	73	7.8	9.5	--
07...	0935	.90	23	79	--	--	--
07...	1000	--	23	73	8.1	9.5	10.8
07...	1040	1.2	--	75	--	9.5	--
07...	1100	1.2	22	79	8.1	9.5	--
07...	1200	1.4	22	79	7.1	9.5	--
07...	1240	1.5	--	74	--	9.5	--
07...	1300	1.5	23	79	7.4	9.5	--
07...	1400	1.6	24	80	7.4	9.5	--
07...	1405	1.6	--	75	--	9.5	--
07...	1500	--	24	73	8.0	9.5	--
07...	1530	1.6	24	79	--	--	--
07...	1600	--	25	70	8.0	9.5	11.0
07...	1730	1.7	24	78	7.5	9.5	--
07...	1805	1.7	--	75	--	9.5	--
07...	1900	1.6	24	77	7.8	9.5	--
07...	2100	1.4	24	78	7.6	9.5	--
07...	2230	1.2	--	75	--	--	--
07...	2300	--	24	72	7.5	9.0	11.2
08...	0825	.32	--	73	--	8.0	--
08...	0830	--	24	69	7.6	8.0	11.4
08...	0910	.74	23	76	--	--	--
20...	1725	--	26	72	7.8	9.5	10.7
20...	1800	.45	--	76	--	9.5	--

TABLE 13.--Onsite determinations of water quality--Continued

					SPF-			
		INSTAN-	ALKA-	CON-	CIFIC			
		TANEous	LINITY	DUCT-				
	TIME	DIS-	AS	ANCE				
		CHARGE	CACO ₃	(MICRO-	PH	TEMPER-	DIS-	SOLVED
		(CFT ³ /S)	(MG/L)	MHOES)	(UNITS)	ATURE	OXYGEN	(MG/L)
		11482468	LITTLE LOST MAN CREEK AT SITE NO. 2, NEAR ORICK--CONTINUED					
NOV., 1974								
21...	0415	--	26	72	7.5	9.5	10.5	
21...	0430	.48	--	74	--	9.5	--	
21...	0600	.48	--	73	--	9.5	--	
21...	1035	--	26	71	8.0	9.5	11.2	
21...	1045	.50	--	75	--	9.5	--	
21...	1235	--	23	70	8.5	10.5	11.1	
21...	1245	.55	--	71	--	10.5	--	
21...	1353	--	24	70	8.3	9.5	10.8	
21...	1400	1.1	--	68	--	9.5	--	
21...	1435	1.8	--	69	--	9.5	--	
21...	1520	3.1	--	74	--	9.5	--	
21...	1610	5.1	--	72	--	9.0	--	
21...	1620	--	21	70	7.6	9.0	--	
21...	1700	--	--	72	7.9	9.0	10.8	
21...	1800	11	--	74	--	9.5	--	
21...	2020	--	20	68	8.2	8.5	10.9	
21...	2040	13	--	68	--	8.5	--	
21...	2200	--	21	72	7.8	8.5	--	
21...	2230	11	--	67	--	8.5	--	
22...	0100	8.5	21	66	7.8	8.5	--	
22...	0230	--	--	--	7.9	8.5	11.6	
22...	0400	--	23	66	7.9	8.0	11.0	
22...	0755	--	23	64	7.9	8.0	11.6	
22...	0800	3.0	--	67	--	8.0	--	
DEC.								
18...	1105	21	--	52	--	8.5	--	
JAN., 1975								
16...	1220	14	--	48	--	8.0	--	
FEB.								
05...	1400	41	9	45	6.6	7.5	11.1	
05...	1415	41	--	57	--	7.5	--	
05...	2150	42	11	45	7.1	8.0	11.6	
06...	0330	38	12	45	7.0	8.0	11.6	
06...	0415	38	--	46	--	8.0	--	
06...	1405	37	--	44	--	9.0	--	
06...	1410	37	12	45	7.2	9.0	11.4	
06...	2045	39	11	46	7.1	8.5	--	
06...	2240	40	--	45	--	8.0	--	
07...	2045	--	12	45	7.1	8.5	11.4	
08...	2000	26	12	45	7.1	9.0	11.4	
08...	2045	27	--	45	--	9.0	--	
08...	2200	--	--	40	7.1	9.0	--	
09...	2300	32	11	45	7.1	9.0	--	
08...	2325	33	--	42	--	9.0	--	
08...	2400	--	--	30	7.1	9.0	--	
09...	0100	--	--	39	7.1	9.0	--	
09...	0110	37	14	44	7.1	9.0	--	
09...	0130	38	--	42	--	9.0	--	
09...	0200	38	12	40	7.1	9.0	11.2	
09...	0250	37	--	41	--	9.0	--	
09...	0300	37	16	40	7.1	9.0	--	
09...	0400	37	--	41	7.1	9.0	--	
09...	0500	36	13	38	7.2	9.0	--	
09...	0515	36	--	42	--	9.0	--	
09...	0700	36	10	34	7.2	8.5	11.4	
09...	0725	36	--	40	--	8.5	--	
09...	0930	35	12	38	7.2	9.0	--	
09...	1215	30	10	33	7.2	9.0	11.6	
09...	1225	35	--	40	--	9.0	--	

TABLE 13.--*Onsite determinations of water quality--Continued*

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (FT ³ /S)	ALKA- LINITY CACO ₃ (MG/L)	SPECI- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)						
11482468 LITTLE LOST MAN CREEK AT SITE NO. 2, NEAR ORICK--CONTINUED													
FEB., 1975													
12...	1140	49	--	41	--	9.0	--						
12...	1145	--	12	43	--	9.0	11.6						
12...	1250	--	--	41	7.1	9.0	--						
12...	1330	49	--	41	--	9.0	--						
12...	1355	--	12	42	7.1	9.0	11.1						
12...	1415	49	--	42	--	9.0	--						
12...	1625	49	--	42	--	9.5	--						
12...	1630	--	11	43	6.9	9.5	11.4						
12...	1720	--	--	43	7.4	9.5	--						
12...	2015	49	13	43	7.4	9.5	11.2						
12...	2115	--	--	42	7.2	9.5	--						
12...	2235	--	--	43	7.4	9.5	--						
12...	2250	52	--	42	--	9.5	--						
12...	2330	--	13	43	7.0	9.5	11.1						
13...	0020	55	--	42	--	9.0	--						
13...	0030	55	--	40	7.2	9.0	--						
13...	0130	--	12	43	7.2	9.5	11.2						
13...	0230	--	--	43	7.3	9.0	--						
13...	0325	--	12	41	7.3	9.0	--						
13...	0345	60	--	41	--	9.0	--						
13...	0740	--	12	40	7.3	9.0	11.3						
13...	0750	64	--	40	--	9.0	--						
13...	0840	--	--	40	7.3	9.0	--						
13...	0845	65	--	39	--	9.0	--						
13...	0900	--	--	40	7.3	9.0	--						
13...	1021	--	11	38	7.2	9.0	11.4						
13...	1050	70	--	38	--	9.0	--						
13...	1145	--	11	45	7.1	9.0	11.6						
13...	1205	75	--	38	--	9.0	--						
13...	1340	--	11	45	7.2	9.0	--						
13...	1635	--	12	40	7.2	8.5	11.4						
13...	1645	71	--	40	--	8.5	--						
13...	2245	--	11	41	7.2	8.5	11.6						
13...	2255	65	--	40	--	8.5	--						
14...	0255	--	12	--	7.3	8.0	11.7						
14...	0310	62	--	41	--	8.0	--						
14...	0825	60	12	46	7.3	7.5	11.2						
19...	2200	117	--	37	--	--	--						
MAR.													
12...	1115	--	12	--	6.3	7.5	11.7						
12...	1205	19	--	47	--	7.5	--						
18...	1345	612	--	28	--	9.0	--						
18...	1430	666	--	28	--	9.0	--						
APR.													
03...	1100	--	13	--	6.8	7.0	12.8						
03...	1245	12	--	46	--	7.0	--						
MAY													
07...	1420	13	--	46	--	9.5	--						
07...	1425	--	10	--	6.2	9.5	11.3						
JUNE													
02...	1400	2.7	--	54	--	11.5	--						
02...	1410	--	18	55	7.4	11.5	10.5						
02...	1415	2.7	18	57	7.4	11.5	--						
08...	1400	2.1	18	57	7.2	13.5	10.3						

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (FT ³ /S)	ALKA- LINITY CACO ₃ (MG/L)	CON- DUCT- ANCE (MICRO- MHOES)	PH	TEMPER- ATURE (DEG C)	SPE- CIFIC DIS- SOLVED OXYGEN (MG/L)						
							(UNITS)						
11482468 LITTLE LOST MAN CREEK AT SITE NO. 2, NEAR ORICK--CONTINUED													
JULY, 1975													
30...	1200	--	27	61	7.0	14.0	10.0						
30...	1300	--	--	65	7.1	16.0	9.8						
30...	1400	--	--	68	7.2	17.0	9.5						
30...	1500	--	--	67	7.2	16.5	9.4						
30...	1530	--	27	66	7.1	16.0	9.3						
30...	1600	--	--	67	7.1	15.5	9.3						
30...	1700	--	--	64	7.1	15.0	9.4						
30...	1800	--	25	64	7.0	14.5	9.4						
30...	1900	--	--	63	7.0	14.5	9.7						
30...	2000	--	--	64	7.0	14.0	9.8						
30...	2100	--	23	64	7.0	14.0	9.8						
30...	2200	--	--	64	7.0	13.5	9.5						
30...	2300	--	--	62	7.0	13.5	9.7						
30...	2400	--	--	62	7.0	13.0	9.7						
31...	0100	--	--	60	7.0	13.0	9.7						
31...	0200	--	27	62	7.1	13.0	9.7						
31...	0300	--	--	58	7.0	12.5	9.8						
31...	0400	--	--	60	7.0	12.5	9.9						
31...	0500	--	23	60	7.0	12.5	10.0						
31...	0600	--	--	60	7.0	12.5	10.0						
31...	0700	--	--	60	7.0	12.0	10.2						
31...	0800	--	24	58	7.0	12.0	10.2						
31...	0900	--	--	59	7.0	12.0	10.1						
31...	1000	--	--	59	7.0	12.5	10.5						
31...	1100	--	--	58	7.0	12.5	10.3						
31...	1200	.53	--	60	7.1	14.0	10.0						
31...	1300	--	--	65	7.2	16.0	9.8						
SEP.	20...	1545	--	20	69	6.4	13.0						
11482470 LITTLE LOST MAN CREEK NEAR ORICK													
MAY, 1974													
10...	1630	--	--	59	--	15.0	9.9						
JULY													
03...	1830	--	--	58	--	--	--						
04...	0430	--	--	60	--	--	--						
18...	1530	A.48	--	66	--	17.0	--						
18...	1730	A.48	--	68	--	16.5	--						
19...	0025	A.50	--	81	--	15.0	--						
19...	0430	A.52	--	79	--	14.0	--						
19...	1030	A.52	--	69	--	16.0	--						
SEP.	10...	1145	A.16	--	73	--	17.5						
10...	1430	A.16	--	73	--	19.0	9.4						
10...	1730	A.12	25	75	7.4	16.5	9.7						
10...	2345	A.16	--	67	7.0	14.5	8.1						
11...	0515	A.12	--	74	--	11.5	8.5						
11...	0850	A.14	--	71	--	12.5	10.0						
11...	1130	--	--	73	--	15.0	9.3						
OCT.	29...	1130	--	--	79	--	--						
NOV.	21...	1540	--	20	77	6.6	9.5						
MAR... 1975	16...	1800	--	--	37	--	--						
MAY	07...	1425	--	10	--	6.2	9.5						
							11.3						

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (FT ³ /S)	ALKALI- NITY CACO ₃ (MG/L)	CON- DUCT- ANCE (MICRO- MHOS)	SPE- CIFIC CON-	PH	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)
					(UNITS)			
11482475 GENEVA CREEK NEAR ORICK								
MAY, 1974								
18...	1350	--	19	50	7.0	9.0	11.3	
SEP.								
17...	1430	--	--	87	--	--	--	
19...	1430	--	28	--	6.8	11.0	6.3	
NOV.								
07...	0900	--	14	70	6.5	9.0	--	
07...	1000	--	14	60	6.5	9.5	--	
07...	1100	--	14	60	6.5	9.0	--	
07...	1200	--	14	60	6.5	9.0	--	
07...	1300	--	14	60	6.5	9.0	--	
07...	1545	--	16	60	6.5	9.5	10.2	
07...	1640	--	16	60	6.4	9.5	--	
07...	1940	--	16	60	6.4	9.0	--	
08...	0730	--	11	65	6.2	8.0	10.1	
20...	2125	--	22	89	6.6	9.5	10.3	
21...	0430	--	19	89	6.8	9.5	10.2	
21...	1015	--	20	78	7.1	10.0	10.2	
21...	1300	.01	22	72	6.8	10.0	10.1	
21...	1345	.03	--	74	--	10.0	--	
21...	1430	.05	--	75	--	10.0	--	
21...	1445	--	16	83	6.6	9.5	9.9	
21...	1505	.19	--	79	--	9.5	--	
21...	1620	.19	--	77	--	9.5	--	
21...	1750	--	14	80	6.4	9.5	10.4	
21...	1755	.16	--	71	--	9.5	--	
21...	2035	--	14	76	6.5	9.5	10.6	
21...	2045	.16	--	74	--	9.5	--	
21...	2320	.16	16	70	6.4	9.0	10.4	
22...	0215	.14	16	76	6.4	8.0	10.2	
22...	0515	.10	12	70	6.5	9.5	10.6	
22...	0745	--	14	72	6.4	9.5	10.7	
22...	0755	.09	--	70	--	9.5	--	
22...	0900	.08	11	72	6.4	9.5	10.4	
JAN., 1975								
16...	1255	.32	12	45	7.5	8.5	10.5	
FEB., 1975								
05...	1420	1.1	--	44	--	8.0	--	
05...	1430	--	--	32	--	8.0	11.6	
05...	1600	--	9	41	--	8.0	--	
05...	1710	--	10	41	6.4	8.0	11.7	
05...	1800	--	--	41	--	8.0	--	
05...	1900	--	10	43	6.6	8.0	--	
05...	2000	--	--	45	--	8.0	--	
05...	2100	1.0	10	46	6.8	8.0	11.5	
05...	2200	--	--	46	--	8.0	--	
05...	2300	--	--	46	6.7	8.0	--	
06...	0040	.87	--	45	--	8.0	--	
06...	0100	--	--	46	--	8.0	--	
06...	0400	.83	12	47	6.8	8.0	11.6	
06...	0615	--	--	58	--	8.5	--	
06...	0755	--	10	56	6.8	8.5	11.6	
06...	0800	.79	--	45	--	8.0	--	
06...	0850	--	--	58	--	8.5	--	
06...	1525	--	12	44	6.8	9.0	11.4	
06...	1535	.73	--	45	--	--	--	
06...	2130	--	11	44	6.8	9.0	11.4	
06...	2145	.69	--	45	--	--	--	
08...	1930	--	10	81	6.6	9.5	11.3	
08...	2039	--	--	78	--	9.5	--	
08...	2235	--	--	71	--	9.0	--	
08...	2325	--	11	64	6.9	9.0	11.1	

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	INSTAN- TANFOUS DIS- CHARGE (CFT ³ /S)	ALKA- LINITY CACO ₃ (MG/L)	CON- DUCT- ANCE (MICRO- MHOES)	SPE- CIFIC CON- DUCT- ANCE (UNITS)	PH	TEMPER- ATURE (DEG C)	DISL SOLVED OXYGEN (MG/L)
11482475 GENEVA CREEK NEAR ORICK--CONTINUED								
FEB., 1975								
09...	0050	--	--	62	--	9.0	--	
09...	0125	--	--	59	6.9	9.5	--	
09...	0230	--	--	59	6.9	9.5	--	
09...	0330	--	13	59	6.9	9.5	11.2	
09...	0430	.92	--	--	6.8	9.5	--	
09...	0530	--	--	60	6.9	9.5	--	
09...	0630	.87	--	--	6.9	9.5	--	
09...	0730	--	11	60	6.9	9.5	11.2	
09...	0830	--	--	60	6.8	9.0	--	
09...	0930	--	--	60	6.8	9.0	--	
09...	1145	.78	11	61	7.0	9.5	11.1	
12...	1200	1.4	--	47	--	9.0	11.3	
12...	1410	1.3	--	43	--	9.5	--	
12...	1615	--	12	48	6.6	9.5	11.2	
12...	1815	1.3	11	50	6.4	9.5	--	
12...	2115	--	11	48	7.0	9.5	--	
12...	2120	1.3	--	45	--	9.5	--	
12...	2245	--	12	47	7.0	9.5	--	
12...	2250	1.6	--	44	--	9.5	--	
12...	2400	1.5	11	48	7.0	9.5	11.1	
13...	0230	--	11	46	7.0	9.5	11.1	
13...	0300	--	11	47	7.0	9.5	10.7	
13...	0420	1.6	--	43	--	9.5	--	
13...	0600	--	11	48	6.8	9.5	11.0	
13...	0630	1.5	--	45	--	9.5	--	
13...	0830	--	11	46	6.8	9.5	11.3	
13...	0845	1.9	--	43	--	9.5	--	
13...	1000	1.6	10	45	7.0	9.5	--	
13...	1225	--	10	45	7.0	9.5	--	
13...	1230	1.5	--	45	--	9.5	--	
13...	1440	1.5	--	44	--	9.5	--	
13...	1745	1.4	10	45	7.0	9.5	--	
13...	2200	--	12	44	7.0	9.5	11.5	
13...	2205	1.2	--	45	--	9.5	--	
14...	0300	--	11	45	6.8	9.0	11.6	
14...	0325	1.1	--	44	--	8.5	--	
14...	0800	--	10	44	7.0	8.0	11.6	
14...	0810	1.0	--	44	--	8.0	--	
25...	1130	.40	--	42	--	8.0	--	
MAR.								
12...	1030	--	40	--	6.4	8.0	11.7	
18...	1820	8.9	--	38	--	9.0	--	
APR.								
04...	1145	1.8	9	45	5.5	7.5	12.3	
MAY								
05...	1415	1.1	11	46	5.8	9.5	11.2	
AUG.								
29...	1400	--	23	74	6.8	12.5	10.3	
11482480 BERRY GLEN CREEK NEAR ORICK								
APR... 1974								
25...	1245	.34	28	85	7.0	10.5	10.4	
JAN., 1975								
13...	1000	--	20	87	7.7	8.0	11.2	
FEB.								
11...	1630	--	--	57	--	10.0	--	
13...	1300	--	--	56	--	--	--	
14...	1630	--	--	48	--	10.0	--	
25...	1115	--	--	60	--	9.0	--	

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (FT ³ /S)	ALKA- LINITY CACO ₃ (MG/L)	SPF- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	
							11482480	BERRY GLEN CREEK NEAR ORICK--CONTINUED
MAR., 1975								
06...	1410	--	--	64	--	--	--	--
18...	1755	--	--	39	--	9.0	--	--
19...	1815	--	--	44	--	--	--	--
20...	1125	--	--	48	--	--	--	--
21...	1315	--	--	44	--	8.0	--	--
APR.								
04...	1030	--	--	61	--	7.5	--	--
MAY								
19...	1530	--	21	123	7.2	15.5	9.7	
AUG.								
29...	1200	--	--	122	--	16.5	--	--
29...	1500	--	35	121	7.2	16.5	9.4	
11482500 REDWOOD CREEK AT ORICK								
MAY, 1974								
13...	1450	--	--	118	7.4	15.0	11.0	
16...	1440	319	--	110	--	14.0	--	--
JUNE								
10...	1435	144	--	143	8.4	21.0	10.0	
26...	1530	--	--	147	--	--	--	--
JULY								
09...	0840	88	--	162	7.2	15.0	9.2	
18...	1200	--	60	160	6.9	17.5	9.4	
18...	1340	A61	64	160	7.4	17.5	9.6	
18...	1500	--	58	158	7.5	18.5	9.4	
18...	1600	--	62	157	7.8	19.0	9.6	
18...	1700	--	61	158	8.1	19.0	9.6	
18...	1800	--	62	160	7.8	19.0	9.6	
18...	1900	--	63	158	7.9	18.5	9.4	
18...	2000	--	61	160	7.8	18.0	8.9	
18...	2100	A64	62	161	7.6	17.5	8.7	
18...	2200	--	--	155	7.6	17.5	8.8	
18...	2300	--	64	155	7.6	17.5	8.7	
18...	2400	--	--	155	7.7	17.0	8.7	
19...	0100	--	63	153	7.7	16.5	8.8	
19...	0200	--	--	151	7.6	16.5	8.8	
19...	0300	--	62	151	7.7	16.5	8.7	
19...	0400	--	62	159	7.6	16.5	8.5	
19...	0500	--	61	157	7.4	16.0	8.5	
19...	0600	--	61	160	7.5	16.0	8.4	
19...	0700	--	61	162	7.6	16.0	8.6	
19...	0800	--	62	162	7.6	16.0	8.8	
19...	0900	--	64	155	7.7	16.5	8.4	
19...	1000	--	61	159	7.7	17.0	9.6	
19...	1100	A66	64	158	7.7	17.5	9.5	
19...	1130	63	--	154	--	17.5	--	--
19...	1200	63	--	161	7.4	19.0	9.8	
24...	1400	51	51	148	7.5	22.0	9.7	
AUG.								
05...	1445	33	--	161	7.4	17.0	--	--

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	INSTANTANEOUS DISCHARGE (FT ³ /S)	ALKALINITY AS CACO ₃ (MG/L)	DUCTANCE (MICRO- MHOS)	SPECIFIC CON-	PH (UNITS)	TEMPER- ATURE (DEG C)	DISSOLVED OXYGEN (MG/L)
					COND.			
11482500 REDWOOD CREEK AT ORICK--CONTINUED								
SEP., 1974								
03...	1415	20	--	160	7.9	20.0	10.7	
10...	1200	--	58	118	6.9	19.5	9.8	
10...	1300	--	58	125	7.3	19.5	9.7	
10...	1500	--	55	124	7.4	19.5	9.7	
10...	1700	--	60	122	7.5	21.0	9.0	
10...	1800	--	57	119	7.9	21.0	8.9	
10...	1900	--	60	122	7.7	20.0	8.5	
10...	2100	--	60	129	7.6	17.5	7.2	
10...	2300	--	63	126	7.5	16.0	7.0	
11...	0100	--	60	124	7.4	15.5	6.8	
11...	0300	--	61	127	7.5	14.5	7.2	
11...	0500	--	58	121	7.3	13.0	7.0	
11...	0700	--	61	120	7.5	12.5	7.0	
11...	0800	--	62	119	7.5	12.0	7.5	
11...	0900	--	58	121	7.5	13.0	7.8	
11...	1100	17	60	125	7.6	17.0	9.2	
11...	1200	17	58	125	7.6	19.0	9.0	
11...	1300	--	60	123	7.7	20.0	9.2	
17...	1645	13	56	159	6.4	17.0	9.4	
NOV.								
07...	0850	38	--	107	--	11.5	--	
21...	1400	98	55	184	6.8	11.0	10.1	
21...	1945	188	--	162	--	10.0	--	
21...	2310	285	--	139	--	9.0	--	
FEB., 1975								
05...	0925	2250	--	81	--	6.0	--	
05...	1510	2460	--	81	--	7.0	--	
05...	2015	2220	--	79	--	7.5	--	
06...	0955	2990	--	79	--	8.0	--	
06...	1000	2970	--	79	--	7.5	--	
06...	1010	2970	--	68	--	7.5	--	
06...	1200	--	29	61	7.4	7.5	12.0	
07...	1435	3200	--	76	--	9.0	--	
08...	1010	2990	--	76	--	9.0	--	
09...	0900	5300	--	74	--	8.0	--	
09...	1300	4940	--	72	--	8.0	--	
12...	0900	4960	--	68	--	9.0	--	
12...	1325	7610	--	64	--	9.0	--	
12...	1530	8770	--	68	--	9.0	--	
12...	1720	9220	--	64	--	10.0	--	
12...	1745	9680	--	68	--	9.0	--	
13...	1030	9610	--	62	--	8.5	--	
13...	1215	9240	--	64	--	9.0	--	
13...	1245	9220	--	63	--	9.0	--	
13...	1315	--	13	70	8.0	9.0	11.8	
14...	1315	7750	--	65	--	8.5	--	
JUNE								
02...	1630	345	48	127	7.7	16.5	--	
08...	1700	--	49	134	7.6	21.0	8.5	
08...	1730	222	52	136	7.6	21.0	--	
JULY								
30...	1200	--	64	175	7.7	18.0	9.0	
30...	1300	--	--	182	7.8	18.0	9.1	
30...	1400	--	65	174	7.9	20.5	9.7	
30...	1500	--	--	174	7.9	21.5	8.8	
30...	1600	--	--	175	8.0	22.0	8.6	
30...	1700	--	64	175	8.0	22.0	9.0	
30...	1800	--	--	172	8.0	21.5	8.3	
30...	1900	--	66	174	7.9	20.5	8.4	

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (FT ³ /S)	ALKA- LINITY AS CACO ₃ (MG/L)	SPE- CIFIC CON- DUCT- (MJC RD- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)						
				ANCE									
114E2500 REDWOOD CREEK AT ORICK--CONTINUED													
JULY, 1975													
30...	2000	--	--	172	7.8	19.0	8.3						
30...	2100	--	--	174	7.8	18.0	8.3						
30...	2200	--	65	177	7.5	17.0	8.1						
30...	2300	--	--	176	7.6	16.5	8.3						
30...	2400	--	65	179	7.6	16.0	8.3						
31...	0100	--	--	175	7.6	16.0	8.3						
31...	0200	--	66	176	7.6	15.0	8.3						
31...	0300	--	--	178	7.5	14.5	8.3						
31...	0400	--	64	176	7.5	14.5	8.5						
31...	0500	--	--	178	7.4	14.0	8.4						
31...	0600	--	64	177	7.4	13.5	8.5						
31...	0700	--	--	177	7.4	13.5	8.7						
31...	0800	--	65	177	7.5	13.5	9.3						
31...	0900	--	64	186	7.6	14.5	9.2						
31...	1000	--	--	183	7.5	16.0	9.5						
31...	1100	--	66	186	7.7	17.5	9.4						
31...	1200	--	65	183	7.8	19.0	9.3						

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	DEPTH (FT)	ALKALINITY AS CACO ₃ (MG/L)	DUCT- ANCE (MTCR0- MHDS)	PH (UNITS)	TEMPER- ATURE, (DFG C)	DIS- SOLVED OXYGEN (MG/L)							
							SPF- CIFIC CON-							
411734124051301 REDWOOD CREEK ESTUARY SITE 1A NEAR ORICK														
MAY , 1974														
16...	1715	.0	--	119	--	13.5	--							
16...	1716	5.0	--	121	--	13.0	--							
16...	1717	7.0	--	121	--	13.0	--							
16...	1718	8.0	--	120	--	13.0	--							
16...	1719	9.0	--	118	--	13.0	--							
16...	1720	9.8	--	119	--	12.5	--							
17...	1050	.0	--	123	--	11.0	--							
17...	1051	4.0	--	123	--	11.0	--							
17...	1052	7.0	--	123	--	11.0	--							
17...	1053	9.0	--	118	--	11.0	--							
17...	1400	.0	46	--	7.2	--	--							
17...	1401	4.0	45	--	7.0	--	--							
17...	1402	8.0	46	--	7.0	--	--							
JULY														
25...	1330	.0	71	2490	7.3	19.0	9.1							
25...	1331	.5	--	2710	--	19.0	--							
25...	1332	1.0	--	2820	--	19.0	--							
25...	1333	1.5	--	3160	--	19.0	--							
25...	1334	1.8	--	3880	--	20.0	--							
25...	1335	2.0	--	15300	--	20.5	--							
25...	1336	2.5	--	27000	--	20.5	--							
25...	1337	2.8	--	30300	--	20.5	--							
25...	1338	3.0	--	31300	--	21.0	--							
25...	1339	3.2	--	32900	--	22.0	--							
25...	1340	3.5	--	32100	--	23.5	--							
25...	1341	3.8	106	30800	7.9	24.0	10.4							
25...	1800	.5	71	14800	7.7	25.5	10.4							
25...	1801	1.0	--	24000	--	25.0	--							
25...	1802	1.5	--	32100	--	22.5	--							
25...	1803	2.0	--	38600	--	23.5	--							
25...	1804	2.5	--	38400	--	24.5	--							
25...	1805	3.0	--	38000	--	25.0	--							
25...	1806	3.5	--	38000	--	26.0	--							
25...	1807	4.0	--	39600	--	24.0	--							
25...	1808	4.5	--	37400	--	27.0	--							
25...	1809	5.0	--	37600	--	27.0	--							
25...	1810	5.5	--	40800	--	23.0	--							
25...	1811	6.0	--	41200	--	22.5	--							
25...	1812	6.5	--	41800	--	22.0	--							
25...	1813	7.0	110	41800	7.8	22.0	9.1							

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	DEPTH (FT)	ALKALINITY AS CACO ₃ (MG/L)	SPF-CIFIC CONDUCT- ANC (MICRO- MHO/S)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)							
							DIS-	SOLVED OXYGEN (MG/L)						
411734124051301 REDWOOD CREEK ESTUARY SITE 1A NEAR ORICK--CONTINUED														
AUG., 1974														
16...	1245	.0	--	11300	--	17.0	--							
16...	1246	1.0	--	30500	--	16.0	--							
16...	1247	2.0	--	37800	--	15.0	--							
16...	1248	3.0	--	39200	--	15.0	--							
16...	1249	4.0	--	39300	--	15.0	--							
16...	1250	5.0	--	39500	--	15.0	--							
16...	1251	6.0	--	39400	--	15.0	--							
16...	1810	.5	--	6800	--	19.5	--							
16...	1811	1.0	--	7000	--	19.5	--							
16...	1812	1.5	--	9000	--	19.0	--							
16...	1813	2.0	--	30000	--	16.0	--							
16...	1814	2.5	--	34000	--	15.5	--							
17...	0120	.5	--	4500	--	16.5	--							
17...	0121	1.5	--	36000	--	16.0	--							
17...	0122	2.5	--	38500	--	15.0	--							
17...	0123	1.5	--	39000	--	14.5	--							
17...	0124	4.5	--	39000	--	14.5	--							
17...	0820	.0	--	6500	--	15.5	--							
17...	0821	1.0	--	9000	--	15.0	--							
17...	0822	2.0	--	29000	--	15.0	--							
17...	0823	2.5	--	32500	--	15.0	--							
SEP.														
20...	1010	.1	68	434	7.5	15.0	9.3							
20...	1011	1.1	--	427	--	15.5	--							
20...	1012	2.1	--	915	--	15.5	--							
20...	1013	3.1	--	19400	--	16.0	--							
20...	1014	4.1	--	28600	--	16.0	--							
20...	1015	5.1	--	30500	--	15.5	--							
20...	1016	6.1	--	32200	--	15.0	--							
20...	1017	7.1	--	33700	--	15.0	--							
20...	1018	8.1	--	35400	--	14.5	--							
20...	1019	9.1	95	37100	7.8	14.0	8.6							
MAY , 1975														
26...	0705	1.0	--	121	7.6	16.0	7.4							
26...	0706	1.5	--	121	7.6	16.0	7.4							
26...	0707	2.0	--	121	7.6	16.0	7.4							
25...	0708	2.5	--	121	7.6	16.0	7.4							
26...	0709	3.0	--	121	7.6	16.0	7.4							
26...	0710	3.5	--	121	7.6	16.0	7.4							
26...	0711	4.0	--	121	7.6	16.0	7.3							
26...	0712	4.5	--	121	7.6	16.0	7.3							
26...	0713	5.0	--	121	7.6	16.0	7.2							
26...	0714	5.5	--	121	7.6	16.0	7.2							
26...	0715	6.0	--	121	7.6	16.0	7.3							
26...	0716	6.5	--	122	7.6	16.0	7.3							
26...	0717	7.0	--	122	7.6	16.0	7.4							
26...	0718	7.5	--	126	7.6	16.0	7.4							
26...	0719	8.0	--	123	7.6	16.0	7.4							
26...	0720	8.5	--	140	7.6	16.0	7.4							
26...	0721	9.0	--	138	7.6	16.0	7.3							
SFP.														
22...	1330	.5	87	14600	7.2	15.5	7.6							
22...	1345	4.0	114	48300	7.9	14.0	8.1							
22...	1510	.0	--	12400	--	15.5	--							
22...	1511	1.5	--	38400	--	15.0	--							
22...	1512	3.0	--	40900	--	19.5	--							
22...	1513	4.0	--	41800	--	19.0	--							
22...	1514	5.0	--	41400	--	19.5	--							
22...	1515	6.0	--	41400	--	19.5	--							

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	DEPTH (FT)	ALKALI- TINITY AS CACO ₃ (MG/L)	SPF- CIFIC CON- DUCT- ANCE (MICRO- MHO/S)	PH	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)						
							(UNITS)						
411734124051302 REDWOOD CREEK ESTUARY SITE 1B NEAR ORICK													
MAY , 1974													
16...	1715	.0	--	122	--	13.6	--						
16...	1716	6.0	--	124	--	13.0	--						
16...	1717	7.0	--	124	--	13.0	--						
16...	1718	8.0	--	121	--	13.0	--						
17...	1100	.0	--	121	--	11.0	--						
17...	1101	3.0	--	121	--	11.0	--						
17...	1102	6.0	--	122	--	11.0	--						
17...	1103	7.0	--	122	--	11.0	--						
17...	1104	8.5	--	116	--	11.5	--						
17...	1405	.0	46	--	7.0	--	9.3						
17...	1406	4.3	46	--	7.0	--	--						
17...	1407	8.7	46	--	7.1	--	10.3						
18...	1112	.0	--	126	--	11.0	--						
18...	1113	3.0	--	128	--	10.5	--						
18...	1114	6.2	--	133	--	10.0	--						
JULY													
25...	1400	.5	69	2940	7.5	26.0	9.6						
25...	1401	1.0	--	2970	--	25.5	--						
25...	1402	1.5	--	3060	--	24.0	--						
25...	1403	1.8	--	3190	--	23.5	--						
25...	1404	2.0	--	32000	--	22.0	--						
25...	1405	2.2	--	26500	--	22.0	--						
25...	1406	2.5	--	28100	--	23.0	--						
25...	1407	2.8	--	32300	--	24.5	--						
25...	1408	3.0	--	33000	--	25.0	--						
25...	1409	3.2	87	31800	7.9	26.0	12.2						
25...	1800	.5	91	3630	7.5	29.0	12.7						
25...	1801	1.0	--	5060	--	29.0	--						
25...	1802	1.5	--	35300	--	26.0	--						
25...	1803	2.0	--	38800	--	24.0	--						
25...	1804	2.5	--	39000	--	24.0	--						
25...	1805	3.0	--	39400	--	24.0	--						
25...	1806	3.5	--	40000	--	23.5	--						
25...	1807	4.0	--	39800	--	24.0	--						
25...	1808	4.5	--	39800	--	24.0	--						
25...	1809	5.0	--	38400	--	26.0	--						
25...	1810	5.5	--	38200	--	26.5	--						
25...	1811	6.0	114	38200	7.7	26.5	8.9						
AUG.													
16...	1315	.0	109	34500	8.0	16.0	8.7						
16...	1316	1.0	--	36000	--	15.5	--						
16...	1317	1.5	--	36000	--	15.0	--						
16...	1318	2.0	--	37300	--	15.0	--						
16...	1319	2.5	--	39000	--	15.0	--						
16...	1320	3.0	--	39200	--	15.0	--						
16...	1321	3.5	--	39500	--	15.0	--						
16...	1322	4.0	--	39800	--	15.0	9.6						
16...	1750	.0	71	--	7.3	--	10.0						
16...	1751	.5	--	6500	--	19.0	--						
16...	1752	1.0	--	7500	--	19.5	--						
16...	1753	1.5	--	14000	--	20.0	--						
16...	1754	2.0	96	33000	7.7	17.0	8.4						
17...	0055	.0	73	3200	7.0	17.0	7.5						
17...	0056	.5	--	3900	--	16.5	--						
17...	0057	1.0	--	20000	--	17.0	--						
17...	0058	1.5	--	37000	--	16.0	--						
17...	0059	2.0	--	34000	--	15.0	--						
17...	0100	2.5	--	38500	--	15.0	--						
17...	0101	3.0	--	39000	--	14.0	--						
17...	0102	3.5	--	39000	--	14.5	--						
17...	0103	4.0	--	39000	--	14.5	--						

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	DEPTH (FT)	ALKALINITY AS CACO ₃ (MG/L)	SPF-C IFIC CON- DUCT- ANCE (MICRO- MHO)	PH	TEMPFR- TURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)							
							(UNITS)							
411734124051302 REDWOOD CREEK ESTUARY SITE 1B NEAR ORICK--CONTINUED														
AUG., 1974														
17...	0104	4.5	--	39000	--	14.5	--							
17...	0105	5.0	115	39000	8.0	14.5	8.0							
17...	0810	.0	--	--	7.3	16.0	6.0							
17...	0811	.5	--	5600	--	16.0	--							
17...	0812	1.0	--	9700	--	16.0	--							
17...	0813	1.5	--	23000	7.1	15.5	2.7							
17...	1415	.0	--	8000	7.2	16.0	8.7							
17...	1416	.5	--	8500	--	16.5	--							
17...	1417	1.0	--	25000	--	16.5	--							
17...	1418	1.5	--	36500	--	15.5	--							
17...	1419	2.0	--	37000	--	15.0	--							
17...	1420	2.5	--	38000	--	14.5	--							
17...	1421	3.0	--	38500	--	14.5	--							
17...	1422	3.4	--	39000	8.2	14.5	9.0							
SEP.														
20...	1030	.2	68	421	7.5	15.5	9.1							
20...	1031	1.2	--	525	--	15.5	--							
20...	1032	2.2	--	1570	--	16.0	--							
20...	1033	3.2	--	21300	--	16.0	--							
20...	1034	4.2	--	28100	--	16.0	--							
20...	1035	5.2	--	30700	--	15.5	--							
20...	1036	6.2	--	32200	--	15.0	--							
20...	1037	7.2	96	33500	7.8	15.0	8.0							
20...	1515	.0	--	944	--	17.0	--							
20...	1516	.5	--	944	--	17.0	--							
20...	1517	1.0	--	944	--	17.0	--							
20...	1518	1.5	--	979	--	17.0	--							
20...	1519	2.0	--	1000	--	17.0	--							
20...	1520	2.5	--	1670	--	18.0	--							
20...	1521	3.0	--	15300	--	18.0	--							
20...	1522	3.5	--	20700	--	18.0	--							
20...	1523	4.0	--	25100	--	18.0	--							
20...	1524	4.5	--	26600	--	17.5	--							
20...	1525	5.0	--	27800	--	17.5	--							
20...	1526	5.5	--	29100	--	17.0	--							
20...	1527	6.0	--	29500	--	17.0	--							
20...	1528	6.5	--	30300	--	17.0	--							
20...	1529	7.0	--	30700	--	17.0	--							
20...	1530	7.5	--	31500	--	17.0	--							
20...	1615	1.0	68	916	7.4	16.0	--							
MAY , 1975														
26...	0100	1.0	--	127	7.8	22.0	8.4							
26...	0101	1.5	--	127	7.8	22.0	8.2							
26...	0102	2.0	--	127	7.8	22.0	7.8							
26...	0103	2.5	--	128	7.7	21.5	7.6							
26...	0104	3.0	--	130	7.7	21.0	7.5							
26...	0105	3.5	--	130	7.7	21.0	7.5							
26...	0106	4.0	--	130	7.7	21.0	7.4							
26...	0107	4.5	--	130	7.7	21.0	7.4							
26...	0108	5.0	--	131	7.7	20.5	7.4							
26...	0109	5.5	--	133	7.6	20.0	7.4							
26...	0110	6.0	--	133	7.6	20.0	7.4							
26...	0111	6.5	--	133	7.6	20.0	7.4							
26...	0112	7.0	--	133	7.6	20.0	7.4							
26...	0113	7.5	--	134	7.6	19.5	7.4							
26...	0114	8.0	--	134	7.6	19.5	7.4							
26...	0115	8.5	--	136	7.5	19.0	7.3							
26...	0116	9.0	--	2260	7.8	19.0	7.3							
26...	0117	9.4	--	27100	7.8	17.5	7.5							

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	DEPTH (FT)	ALKA- LINITY AS CACO ₃ (MG/L)	SPF- CIFIC CON- DUCT- ANCE (MTCNO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)
411734124051302 REDWOOD CREEK ESTUARY SITE 1B NEAR ORICK--CONTINUED							
MAY , 1975							
26...	0640	1.0	47	113	7.6	17.0	7.4
26...	0641	1.5	--	113	7.6	17.0	7.4
26...	0642	2.0	--	113	7.6	17.0	7.4
26...	0643	2.5	--	111	7.6	17.5	7.4
26...	0644	3.0	--	111	7.6	17.5	7.4
26...	0645	3.0	44	116	7.4	17.0	7.4
26...	0646	4.0	--	111	7.6	17.5	7.4
26...	0647	4.5	--	111	7.6	17.5	7.4
26...	0648	5.0	--	110	7.6	18.0	7.4
26...	0649	5.5	--	111	7.6	17.5	7.4
26...	0650	6.0	--	111	7.6	17.5	7.4
26...	0651	6.5	--	111	7.6	17.5	7.4
26...	0652	7.0	--	110	7.6	18.0	7.3
26...	0653	7.5	--	114	7.5	17.5	7.3
26...	0654	8.0	--	113	7.5	18.0	7.3
26...	0655	8.5	--	113	7.5	18.0	7.3
26...	0656	9.0	--	131	7.5	18.0	7.3
26...	0657	9.5	--	278	7.5	17.5	7.4
SEP.							
22...	1350	.5	85	15100	7.3	15.5	7.2
22...	1400	7.0	114	45700	8.0	13.5	8.2
22...	1520	0.0	--	10600	--	17.0	--
22...	1521	1.5	--	36000	--	18.5	--
22...	1522	3.0	--	41300	--	18.5	--
22...	1523	4.0	--	42000	--	18.5	--
22...	1524	5.0	--	42100	--	18.5	--
22...	1525	6.0	--	42200	--	18.5	--
22...	1526	6.5	--	42200	--	18.5	--
411734124051303 REDWOOD CREEK ESTUARY SITE 1C NEAR ORICK							
MAY , 1974							
16...	1745	.0	--	122	--	14.0	--
16...	1746	6.7	--	124	--	13.5	--
16...	1747	7.2	--	124	--	13.5	--
17...	1110	0.0	--	119	--	11.5	--
17...	1111	3.0	--	119	--	11.5	--
17...	1112	5.0	--	119	--	11.5	--
17...	1113	7.0	--	120	--	11.5	--
17...	1114	7.5	--	120	--	11.5	--
17...	1410	0.0	46	--	7.2	--	--
17...	1411	3.5	47	--	7.0	--	--
17...	1412	7.0	45	--	7.1	--	--
JULY							
25...	1420	.5	70	2980	7.6	26.0	9.5
25...	1421	1.0	--	2980	--	26.0	--
25...	1422	1.2	--	2970	--	25.5	--
25...	1423	1.5	--	3010	--	24.5	--
25...	1424	1.8	--	3490	--	24.0	--
25...	1425	2.0	--	22400	--	24.0	--
25...	1426	2.2	--	27500	--	21.0	--
25...	1427	2.5	--	30700	--	23.0	--
25...	1428	2.4	93	31000	7.8	25.0	10.6
25...	1400	.5	88	3550	7.7	29.5	12.3
25...	1401	1.0	--	7740	--	29.5	--
25...	1402	1.5	--	34600	--	27.0	--
25...	1403	2.0	--	37000	--	25.0	--

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	DEPTH (FT)	ALKALI- LINITY AS CACO ₃ (MG/L)	SPF- CIFIC CON- DUCT- ANCE (MICRO- MHOES)	PH	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)							
							UNITS							
411734124051303 REDWOOD CREEK ESTUARY SITE 1C NEAR ORICK--CONTINUED														
JULY, 1974														
25...	1404	2.5	--	38400	--	24.5	--							
25...	1405	3.0	--	39300	--	24.0	--							
25...	1406	3.5	--	39400	--	24.0	--							
25...	1407	4.0	--	39500	--	24.0	--							
24...	1408	4.5	--	40000	--	24.0	--							
25...	1409	5.0	--	40400	--	23.5	--							
25...	1410	5.5	112	40400	7.8	23.5	9.5							
AUG.														
16...	1325	.5	--	12000	--	17.5	--							
16...	1326	1.0	--	36000	--	16.5	--							
16...	1327	2.0	--	37500	--	15.5	--							
16...	1328	3.0	--	39500	--	15.0	--							
16...	1735	.5	--	6400	--	19.5	--							
16...	1736	1.0	--	7000	--	19.5	--							
17...	0040	.0	--	6000	--	16.5	--							
17...	0041	1.0	--	32000	--	15.5	--							
17...	0042	2.0	--	39000	--	15.0	--							
17...	0043	3.0	--	39000	--	14.5	--							
17...	0044	4.0	--	39000	--	14.0	--							
17...	0750	.0	--	7000	--	16.0	--							
17...	0751	1.0	--	10000	--	16.0	--							
SEP.														
20...	1020	.0	67	490	7.5	16.0	9.0							
20...	1021	1.8	--	536	--	16.5	--							
20...	1022	2.2	--	1780	--	16.5	--							
20...	1023	2.5	--	2480	--	17.0	--							
20...	1024	2.8	--	17800	--	17.5	--							
20...	1025	3.5	--	23200	--	17.5	--							
20...	1026	5.5	--	29000	--	17.5	--							
20...	1027	6.6	93	30700	7.7	17.0	8.1							
MAY, 1975														
26...	0630	1.0	--	110	7.6	19.0	7.6							
26...	0631	1.5	--	113	7.6	18.0	7.6							
26...	0632	2.0	--	113	7.6	18.0	7.6							
26...	0633	2.5	--	113	7.6	18.0	7.6							
26...	0634	3.0	--	114	7.6	17.5	7.6							
26...	0635	3.5	--	114	7.6	17.5	7.6							
26...	0636	4.0	--	114	7.6	17.5	7.6							
26...	0637	4.5	--	116	7.6	17.0	7.7							
26...	0638	5.0	--	116	7.6	17.0	7.7							
26...	0639	5.5	--	116	7.6	17.0	7.7							
26...	0640	6.0	--	116	7.6	17.0	7.7							
26...	0641	6.5	--	116	7.6	17.0	7.7							
26...	0642	7.0	--	116	7.6	17.0	7.7							
26...	0643	7.5	--	116	7.6	17.0	7.7							
26...	0644	7.9	--	116	7.6	17.0	7.7							
SEP.														
22...	1410	.5	87	17800	7.3	15.5	7.2							
22...	1415	5.0	110	42000	8.0	13.5	8.2							
22...	1510	.0	--	10500	--	20.0	--							
22...	1511	1.5	--	35800	--	19.5	--							
22...	1512	7.0	--	41300	--	18.5	--							
22...	1513	4.0	--	42000	--	18.5	--							
22...	1514	5.0	--	42400	--	18.5	--							

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	DEPTH (FT)	ALKALINITY AS (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	TEMPER- ATURE (DEG C)	SOLVED OXYGEN (MG/L)
							411734124051801 REDWOOD CREEK ESTUARY SITE 2A NEAR ORICK
MAY , 1974							
16...	1705	.0	--	129	--	14.5	--
16...	1706	1.8	--	126	--	14.0	--
16...	1707	4.0	--	121	--	13.5	--
16...	1708	4.9	--	124	--	13.0	--
16...	1709	8.0	--	117	--	13.0	--
16...	1710	0.0	--	120	--	13.0	--
17...	0945	.0	--	136	--	12.0	--
17...	0946	3.7	--	135	--	11.5	--
17...	0947	5.1	--	134	--	11.0	--
17...	0948	7.0	--	123	--	11.0	--
17...	0949	8.5	--	123	--	11.0	--
17...	0951	10	--	123	--	11.0	--
17...	1120	.0	--	135	--	14.0	--
17...	1121	1.2	--	134	--	13.5	--
17...	1122	2.5	--	130	--	13.0	--
17...	1123	3.0	--	127	--	12.5	--
17...	1124	3.7	--	125	--	12.0	--
17...	1125	5.4	--	122	--	11.5	--
17...	1126	7.0	--	122	--	11.5	--
17...	1127	8.5	--	117	--	12.0	--
17...	1128	11	--	117	--	12.0	--
17...	1310	.0	40	--	6.8	--	--
17...	1311	5.0	44	--	7.0	--	--
17...	1312	10	45	--	7.0	--	--
18...	1105	.0	--	129	--	11.0	--
18...	1106	3.0	--	129	--	10.5	--
18...	1107	7.0	--	133	--	10.0	--
JULY							
25...	1820	.5	--	3050	--	29.5	--
25...	1821	1.0	--	15300	--	30.0	--
25...	1822	1.5	--	30000	--	29.5	--
25...	1823	2.0	--	34000	--	29.0	--
25...	1824	2.5	--	35700	--	27.0	--
25...	1825	3.0	--	37000	--	26.0	--
25...	1826	3.5	--	37700	--	26.0	--
25...	1827	4.0	--	39000	--	25.0	--
25...	1828	4.5	--	39500	--	25.0	--
25...	1829	5.0	--	39500	--	25.0	--
25...	1830	5.5	--	39500	--	25.0	--
25...	1831	6.0	--	39500	--	25.0	--
25...	1832	6.5	--	39900	--	24.5	--
AUG.							
16...	1216	.0	--	35000	--	17.5	--
16...	1217	1.0	--	35200	--	17.0	--
16...	1218	2.0	--	35200	--	17.0	--
16...	1219	3.0	--	37100	--	17.0	--
16...	1220	4.0	--	36900	--	16.5	--
16...	1900	.0	--	6000	--	19.0	--
16...	1901	1.0	--	6500	--	19.0	--
16...	1902	2.0	--	13000	--	17.0	--
16...	0150	.0	--	14000	--	16.5	--
17...	0151	1.0	--	28000	--	16.5	--
17...	0152	2.0	--	37000	--	16.0	--
17...	0153	3.0	--	38000	--	15.0	--
17...	0154	4.0	--	39000	--	14.5	--
17...	0900	.0	--	8000	--	15.0	--
17...	0901	1.0	--	10000	--	14.5	--
17...	0902	2.0	--	30000	--	14.0	--

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	DEPTH (FT)	ALKALI- LINITY AS CACO ₃ (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOES)	PH	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)
411734124051801 REDWOOD CREEK ESTUARY SITE 2A NEAR ORICK--CONTINUED							
SEP., 1974							
20...	1040	.5	68	525	7.6	15.5	9.1
20...	1041	1.4	--	1000	--	15.5	--
20...	1042	2.5	--	2660	--	16.0	--
20...	1043	3.5	--	24200	--	16.0	--
20...	1044	4.5	--	29000	--	16.0	--
20...	1045	5.5	--	30700	--	15.5	--
20...	1046	6.5	--	32500	--	15.0	--
20...	1047	7.5	--	33700	--	15.0	--
20...	1048	8.5	97	35500	8.0	14.5	9.2
MAY , 1975							
26...	0720	1.0	--	151	7.6	17.0	7.1
26...	0721	1.5	--	153	7.6	17.0	7.1
26...	0722	2.0	--	153	7.6	17.0	7.1
26...	0723	2.5	--	153	7.6	17.0	7.1
26...	0724	3.0	--	156	7.6	16.0	7.2
26...	0725	3.5	--	152	7.6	16.0	7.2
26...	0726	4.0	--	148	7.6	16.0	7.1
26...	0727	4.5	--	146	7.6	16.0	7.1
26...	0728	5.0	--	146	7.6	15.5	7.2
26...	0729	5.5	--	145	7.6	15.5	7.4
26...	0730	6.0	--	145	7.6	15.5	7.2
26...	0731	6.5	--	144	7.6	15.5	7.3
26...	0732	7.0	--	134	7.5	15.5	7.3
26...	0733	7.5	--	131	7.5	15.5	7.3
26...	0734	8.0	--	137	7.5	15.5	7.3
26...	0735	8.5	--	137	7.5	15.5	7.3
SEP.							
22...	1100	.5	88	16200	7.4	14.0	6.8
22...	1110	8.0	113	45900	8.0	13.0	8.1
22...	1540	.0	--	11300	--	20.5	--
22...	1541	1.5	--	35400	--	20.0	--
22...	1542	3.0	--	40700	--	19.0	--
22...	1543	4.0	--	41800	--	19.0	--
22...	1544	5.0	--	41800	--	19.0	--
22...	1545	5.5	--	42200	--	18.5	--
411734124051802 REDWOOD CREEK ESTUARY SITE 2B NEAR ORICK							
MAY , 1974							
16...	1630	.0	--	132	--	14.0	--
16...	1631	1.8	--	127	--	13.5	--
16...	1632	2.5	--	129	--	13.0	--
16...	1633	6.0	--	123	--	12.5	--
16...	1634	9.0	--	123	--	12.5	--
16...	1635	9.4	--	118	--	12.5	--
17...	0930	.0	--	131	--	11.5	--
17...	0931	7.0	--	123	--	11.0	--
17...	0932	8.5	--	127	--	11.0	--
17...	0933	10	--	126	--	11.0	--
17...	1305	.0	40	--	6.7	--	10.0
17...	1306	5.2	42	--	7.0	--	--
17...	1307	10	43	--	6.9	--	10.3
18...	1100	.0	--	142	--	11.0	--
18...	1101	3.6	--	132	--	11.0	--
18...	1102	6.8	--	120	--	10.0	--

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	DEPTH (FT)	ALKALINITY CACO ₃ (MG/L)	SPECIFIC DUCTANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	SOLVED OXYGEN (MG/L)						
							CON- CENTRATION AS MHOH						
411734124051802 REDWOOD CREEK ESTUARY SITE 2B NEAR ORICK--CONTINUED													
JULY, 1974													
25...	1845	1.0	75	8150	7.5	29.5	--						
26...	1900	.5	77	7740	8.1	29.5	11.8						
25...	1901	1.0	--	17300	--	29.5	--						
25...	1902	1.5	--	32400	--	28.0	--						
25...	1903	2.0	--	34800	--	28.0	--						
25...	1904	2.5	--	37700	--	26.0	--						
25...	1905	3.0	--	38200	--	25.0	--						
25...	1906	3.5	--	39300	--	24.0	--						
25...	1907	4.0	--	39400	--	24.5	--						
25...	1908	4.5	--	39400	--	24.5	--						
25...	1909	5.0	--	39600	--	24.5	--						
25...	1910	5.5	--	39900	--	24.5	--						
25...	1911	6.0	--	40000	--	24.5	--						
25...	1912	6.5	111	40200	7.8	24.5	8.9						
AUG.													
14...	1155	.0	115	34000	7.7	17.5	8.5						
16...	1156	1.0	--	35000	--	17.0	--						
16...	1157	2.0	--	37000	--	16.5	--						
16...	1158	3.0	--	37000	--	16.5	--						
16...	1159	4.0	120	37200	8.0	16.5	8.8						
16...	1445	.0	102	--	7.7	--	9.2						
16...	1446	.5	--	5000	--	19.0	--						
16...	1847	1.0	--	7000	--	19.5	--						
16...	1448	1.5	--	20000	--	19.0	--						
16...	1849	2.0	--	32000	--	17.0	--						
16...	1850	2.5	82	35000	7.9	16.5	8.5						
17...	0140	.0	74	4700	7.6	16.5	--						
17...	0141	.5	--	7500	--	16.5	--						
17...	0142	1.0	--	31000	--	16.5	--						
17...	0143	1.5	--	33000	--	16.0	--						
17...	0144	2.0	--	37000	--	15.0	--						
17...	0145	3.0	--	39000	--	15.0	--						
17...	0146	4.0	--	39500	--	14.5	--						
17...	0147	5.0	106	39500	7.9	14.5	8.1						
17...	0845	.0	--	--	7.2	--	6.1						
17...	0846	.5	--	9500	--	14.5	--						
17...	0847	1.0	--	10000	--	14.8	--						
17...	0848	1.5	--	23500	--	15.0	--						
17...	0849	2.0	--	31000	7.5	14.0	4.7						
17...	1440	.0	--	8500	7.2	17.0	8.2						
17...	1441	.5	--	9000	--	17.0	--						
17...	1442	1.0	--	26000	--	16.0	--						
17...	1443	1.5	--	33000	--	15.5	--						
17...	1444	2.0	--	36500	--	15.5	--						
17...	1445	2.5	--	34000	--	15.0	--						
17...	1446	3.0	--	39000	--	15.0	--						
17...	1447	3.5	--	39500	--	15.5	--						
17...	1448	4.0	--	39500	8.1	15.5	8.9						
SEP.													
20...	1050	.0	68	732	7.7	15.5	9.0						
20...	1051	1.0	--	756	--	15.5	--						
20...	1052	2.0	--	1820	--	16.0	--						
20...	1053	3.0	--	16900	--	16.0	--						
20...	1054	4.0	--	27200	--	16.0	--						
20...	1055	5.0	--	30200	--	16.0	--						
20...	1056	6.0	--	32200	--	15.0	--						
20...	1057	7.0	--	33500	--	15.0	--						
20...	1058	8.0	95	35000	7.9	14.5	9.2						
20...	1510	.0	--	1420	--	17.0	--						
20...	1511	1.0	--	1420	--	17.0	--						
20...	1532	1.5	--	1480	--	17.0	--						
20...	1513	2.0	--	1650	--	17.0	--						
20...	1534	2.5	--	4830	--	18.0	--						

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	DEPTH (FT)	ALKALI- LINITY AS CACO ₃ (MG/L)	SPF- CIFIC CON- DUCT- ANCE (MICRO- MHO/S)	PH (UNITS)	TEMPER- ATURE (DEG C)	OTS- SOLVED OXYGEN (MG/L)
SEP., 1974							
20...	1535	3.0	--	16700	--	18.0	--
20...	1536	4.0	--	24400	--	17.5	--
20...	1537	5.0	--	28100	--	17.0	--
20...	1538	6.0	--	29500	--	17.0	--
20...	1539	7.0	--	30700	--	17.0	--
20...	1540	7.5	--	30900	--	17.0	--
20...	1541	8.0	--	31900	--	17.0	--
20...	1615	1.0	69	968	7.4	16.0	--
MAY , 1975							
26...	0040	1.0	--	148	7.6	19.0	8.3
26...	0041	1.5	--	147	7.6	19.0	8.1
26...	0042	2.0	--	158	7.6	19.0	8.0
26...	0043	2.5	--	158	7.6	19.0	7.8
26...	0044	3.0	--	158	7.6	19.0	7.6
26...	0045	3.5	--	158	7.6	19.0	7.5
26...	0046	4.0	--	157	7.6	19.5	7.5
26...	0047	4.5	--	158	7.6	19.0	7.3
26...	0048	5.0	--	158	7.6	19.0	7.3
26...	0049	5.5	--	158	7.6	19.0	7.2
26...	0050	6.0	--	157	7.6	19.5	7.2
26...	0051	6.5	--	147	7.6	19.0	7.2
26...	0052	7.0	--	148	7.6	18.5	7.2
26...	0053	7.5	--	148	7.5	18.5	7.1
26...	0054	8.0	--	148	7.5	18.5	7.1
26...	0055	8.5	--	276	7.5	18.0	7.1
26...	0056	9.0	--	21200	7.7	18.0	7.1
26...	0057	9.5	--	27600	7.8	17.5	7.4
26...	0735	1.0	--	145	7.6	16.0	7.2
26...	0736	1.5	--	145	7.6	16.0	7.2
26...	0737	2.0	--	149	7.6	16.0	7.1
26...	0738	2.5	--	149	7.6	16.0	7.2
26...	0739	3.0	--	145	7.6	16.0	7.1
26...	0740	3.5	--	140	7.6	15.5	7.2
26...	0741	4.0	--	142	7.6	15.5	7.2
26...	0742	4.5	--	142	7.6	15.5	7.2
26...	0743	5.0	--	135	7.6	15.5	7.2
26...	0744	5.5	--	137	7.6	15.5	7.2
26...	0745	6.0	--	130	7.6	15.0	7.3
26...	0746	6.5	--	130	7.6	15.0	7.3
26...	0747	7.0	--	131	7.6	15.0	7.3
26...	0748	7.5	--	130	7.5	15.0	7.3
26...	0749	8.0	--	128	7.6	15.0	7.3
26...	0750	8.5	--	126	7.6	15.0	7.3
26...	0751	9.0	--	125	7.6	15.0	7.3
26...	0752	9.5	--	174	7.7	15.0	7.3
26...	0753	10	--	27300	7.8	15.5	7.2
26...	0754	11	43	30000	7.7	15.0	6.9
26...	0755	.0	48	147	7.2	15.5	--
SEP.							
22...	1125	.5	91	21700	7.4	14.0	6.7
22...	1130	5.5	114	47100	8.0	13.0	8.5
22...	1550	.0	--	12300	--	18.5	--
22...	1551	1.5	--	35800	--	18.5	--
22...	1552	2.0	--	42800	--	17.0	--
22...	1553	4.0	--	43400	--	17.0	--
22...	1554	5.0	--	41700	--	19.0	--
22...	1555	6.0	--	41400	--	19.5	--
..	1556	6.5	--	41400	--	19.5	--

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	DEPTH (FT)	ALKALINITY	AS CACO ₃ (MG/L)	SPECIFIC DUCTANCE (MICRO- MHO/S)	PH	SPECIFIC DUCTANCE	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)
							(UNITS)		
411734124051803 REDWOOD CREEK ESTUARY SITE 2C NEAR ORICK									
MAY 6 1974									
16...	1650	.0	--	130	--	--	13.0	--	--
16...	1651	4.0	--	130	--	--	13.0	--	--
16...	1652	6.0	--	143	--	--	13.0	--	--
16...	1653	8.0	--	152	--	--	12.5	--	--
16...	1654	9.0	--	145	--	--	12.5	--	--
16...	1655	10	--	164	--	--	12.5	--	--
17...	0915	.0	--	174	--	--	12.5	--	--
17...	0916	2.0	--	160	--	--	12.0	--	--
17...	0917	2.4	--	151	--	--	12.0	--	--
17...	0918	3.3	--	132	--	--	11.5	--	--
17...	0919	7.0	--	123	--	--	11.0	--	--
17...	0920	8.0	--	132	--	--	11.0	--	--
17...	0930	9.3	--	123	--	--	11.0	--	--
17...	1300	.0	41	--	6.8	--	--	--	--
17...	1301	4.6	42	--	6.8	--	--	--	--
17...	1302	9.3	42	--	6.8	--	--	--	--
JULY									
25...	1800	.5	--	4600	--	--	29.0	--	--
25...	1801	1.0	--	11200	--	--	30.0	--	--
25...	1802	1.5	--	30400	--	--	29.0	--	--
25...	1803	2.0	--	32700	--	--	29.0	--	--
25...	1804	2.5	--	34300	--	--	28.0	--	--
25...	1805	3.0	--	35500	--	--	27.0	--	--
25...	1806	3.5	--	37300	--	--	26.5	--	--
25...	1807	4.0	--	38200	--	--	26.0	--	--
25...	1808	4.5	--	38800	--	--	25.5	--	--
25...	1809	5.0	--	39100	--	--	25.5	--	--
25...	1810	5.5	--	38700	--	--	26.0	--	--
AUG.									
16...	1125	.0	--	34200	--	--	18.0	--	--
16...	1126	1.0	--	37500	--	--	17.0	--	--
16...	1127	2.0	--	37300	--	--	16.5	--	--
16...	1128	3.0	--	37000	--	--	16.5	--	--
16...	1129	4.0	--	37000	--	--	16.5	--	--
16...	1838	.0	--	4400	--	--	18.0	--	--
16...	1839	1.0	--	4400	--	--	18.0	--	--
16...	1840	2.0	--	34000	--	--	17.5	--	--
17...	0130	.0	--	6000	--	--	16.5	--	--
17...	0131	1.0	--	22000	--	--	16.5	--	--
17...	0132	2.0	--	37000	--	--	16.0	--	--
17...	0133	3.0	--	39000	--	--	15.0	--	--
17...	0134	4.0	--	39000	--	--	14.5	--	--
17...	0135	5.0	--	39000	--	--	14.5	--	--
17...	0830	.0	--	11000	--	--	16.0	--	--
17...	0831	1.0	--	12000	--	--	17.0	--	--
17...	0832	2.0	--	26000	--	--	17.0	--	--
SEP.									
20...	1045	.0	69	1090	7.5	16.0	9.0	--	--
20...	1046	2.5	--	2060	--	--	16.0	--	--
20...	1047	2.7	--	5360	--	--	16.5	--	--
20...	1048	2.8	--	10600	--	--	17.0	--	--
20...	1049	3.5	--	22600	--	--	17.5	--	--
20...	1050	4.5	--	26700	--	--	17.5	--	--
20...	1051	6.9	PR	10900	7.8	16.5	9.3	--	--
20...	1545	.0	--	1500	--	--	17.0	--	--
20...	1546	.5	--	1480	--	--	17.5	--	--
20...	1547	1.5	--	1570	--	--	17.5	--	--
20...	1548	2.0	--	1340	--	--	18.0	--	--
20...	1549	2.5	--	7130	--	--	18.0	--	--
20...	1550	3.0	--	15200	--	--	18.0	--	--

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	DEPTH (FT)	ALKALINITY AS CACO ₃ (MG/L)	SPF-CIFIC DUCT-ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)							
							CON-							
411734124051803 REDWOOD CREEK ESTUARY SITE 2C NEAR ORICK--CONTINUED														
SEPT., 1974														
20...	1551	7.5	--	18400	--	18.0	--							
20...	1552	4.0	--	22600	--	17.5	--							
20...	1553	4.5	--	26600	--	17.0	--							
20...	1554	5.5	--	28600	--	17.0	--							
20...	1555	6.5	--	29900	--	17.0	--							
20...	1556	7.4	--	30600	--	17.0	--							
MAY , 1975														
26...	0005	1.0	--	147	7.6	22.5	8.0							
26...	0006	1.5	--	148	7.6	22.0	7.8							
26...	0007	2.0	--	153	7.6	20.5	7.8							
26...	0008	2.5	--	157	7.6	19.5	7.8							
26...	0009	3.0	--	157	7.6	19.5	7.8							
26...	0010	3.5	--	158	7.6	19.0	7.7							
26...	0011	4.0	--	158	7.6	19.0	7.7							
26...	0012	4.5	--	158	7.6	19.0	7.7							
26...	0013	5.0	--	158	7.6	19.0	7.8							
26...	0014	5.5	--	158	7.6	19.0	7.7							
26...	0015	6.0	--	160	7.6	18.5	7.7							
26...	0016	6.5	--	160	7.6	18.5	7.7							
26...	0017	7.0	--	161	7.6	18.0	7.7							
26...	0018	7.5	--	161	7.5	18.0	7.6							
26...	0019	8.0	--	448	7.3	18.0	7.7							
26...	0020	8.4	--	502	7.6	18.5	7.5							
26...	0800	1.0	--	162	7.7	16.0	7.1							
26...	0801	1.5	--	162	7.7	16.0	7.1							
26...	0802	2.0	--	162	7.6	16.0	7.1							
26...	0803	2.5	--	163	7.7	16.0	7.1							
26...	0804	3.0	--	163	7.7	16.0	7.1							
26...	0805	3.5	--	163	7.6	16.0	7.1							
26...	0806	4.0	--	162	7.7	16.0	7.0							
26...	0807	4.5	--	162	7.6	16.0	7.0							
26...	0808	5.0	--	160	7.6	15.5	7.0							
26...	0809	5.5	--	159	7.6	15.5	7.1							
26...	0810	6.0	--	156	7.6	15.5	7.1							
26...	0811	6.5	--	146	7.6	15.5	7.2							
26...	0812	7.0	--	129	7.6	15.0	7.2							
26...	0813	7.5	--	129	7.6	15.0	7.2							
26...	0814	8.0	--	128	7.6	15.0	7.2							
26...	0815	8.5	--	131	7.6	15.0	7.2							
26...	0816	9.0	--	134	7.6	15.0	7.2							
26...	0817	9.5	--	6200	7.8	15.0	7.3							
26...	0818	10	--	26800	7.9	15.5	7.2							
SEP.														
22...	1145	.5	105	37700	7.8	13.5	6.8							
22...	1150	4.0	112	42000	8.1	13.0	7.6							
22...	1600	.0	--	11200	--	19.5	--							
22...	1601	1.5	--	35000	--	19.0	--							
22...	1602	3.0	--	42000	--	17.5	--							
22...	1603	4.0	--	42300	--	18.0	--							
22...	1604	5.0	--	41400	--	19.5	--							

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	DEPTH (FT)	ALKA- LINITY C _{ACO} 3 (MG/L)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHO/S)	PH (UNITS)	TEMPER- ATURE, (DEG C)	DIS- SOLVED OXYGEN (MG/L)						
							AS						
411732124051801 REDWOOD CREEK ESTUARY SITE 3A NEAR ORICK													
MAY , 1974													
16...	1545	.0	--	125	--	13.0	--						
16...	1546	6.2	--	125	--	12.5	--						
16...	1547	6.5	--	122	--	12.0	--						
17...	1025	.0	--	140	--	13.0	--						
17...	1026	3.0	--	143	--	12.5	--						
17...	1027	7.0	--	137	--	12.0	--						
17...	1029	8.5	--	143	--	11.5	--						
17...	1450	.0	--	--	--	--	10.1						
17...	1451	8.8	--	--	--	--	10.2						
18...	1107	.0	--	129	--	11.0	--						
18...	1108	2.7	--	132	--	10.5	--						
18...	1109	5.3	--	133	--	10.0	--						
SEP.													
20...	1100	.0	69	854	7.4	15.5	9.1						
20...	1101	2.0	--	1100	--	15.5	--						
20...	1102	2.5	--	2420	--	16.0	--						
20...	1103	3.0	82	16500	7.8	17.0	9.5						
MAY , 1975													
25...	2350	1.0	--	296	7.6	18.5	7.7						
25...	2351	1.5	--	316	7.6	19.0	7.6						
25...	2352	2.0	--	316	7.6	19.0	7.6						
25...	2353	2.5	--	305	7.6	20.5	7.6						
25...	2354	3.0	--	305	7.6	20.5	7.5						
25...	2355	3.5	--	261	7.6	20.5	7.5						
25...	2356	3.9	--	216	7.5	21.0	7.5						
26...	0820	1.0	--	153	7.9	17.0	7.0						
26...	0821	1.5	--	156	7.9	17.0	7.0						
26...	0822	2.0	--	156	7.8	16.5	7.0						
26...	0823	2.5	--	156	7.8	16.5	6.8						
26...	0824	3.0	--	151	7.7	16.0	7.0						
26...	0825	3.5	--	151	7.7	15.5	7.1						
26	0826	3.8	--	154	7.7	15.5	7.1						
411732124051802 REDWOOD CREEK ESTUARY SITE 3B NEAR ORICK													
MAY , 1974													
16...	1600	.0	--	132	--	15.5	--						
16...	1601	2.5	--	130	--	15.0	--						
16...	1602	3.0	--	128	--	14.0	--						
16...	1603	3.5	--	125	--	13.5	--						
16...	1604	4.0	--	120	--	13.0	--						
16...	1605	4.7	--	121	--	12.5	--						
17...	1040	.0	--	137	--	14.5	--						
17...	1041	3.0	--	137	--	14.5	--						
17...	1042	5.0	--	138	--	14.5	--						
17...	1500	.0	40	--	6.8	--	--						
17...	1501	2.4	--	--	--	--	9.8						
17...	1502	4.8	40	--	6.8	--	--						
SEP.													
20...	1105	.0	69	1070	7.6	15.5	9.5						
20...	1110	.5	--	1050	--	15.5	--						
20...	1115	1.0	--	1200	--	15.5	--						
20...	1120	1.5	--	1440	--	15.5	--						
20...	1125	2.0	--	1590	--	15.5	--						
20...	1130	2.5	69	1830	7.6	15.5	9.7						
20...	1600	.0	--	968	--	17.0	--						
20...	1611	.5	--	1000	--	17.0	--						
20...	1602	1.0	--	1120	--	17.0	--						
20...	1603	1.5	--	1120	--	17.0	--						
20...	1604	2.0	--	1300	--	17.0	--						
20...	1605	2.4	--	2420	--	16.0	--						
20...	1620	1.0	69	1050	7.6	16.0	--						

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	DEPTH (FT)	ALKALINITY AS CACO ₃ (MG/L)	SPECIFIC CONDUCTANCE (MICRO- MHO/S)	PH (UNITS)	TEMPER- ATURE (DEG C)	DISSOLVED OXYGEN (MG/L)
411732124051802 REDWOOD CREEK ESTUARY SITE 3B NEAR ORICK--CONTINUED							
MAY , 1975							
25...	2340	1.0	--	319	7.6	18.5	8.2
25...	2342	1.5	--	324	7.6	21.0	7.9
25...	2345	1.7	--	421	7.5	20.0	7.9
25...	0830	1.0	--	211	7.8	17.0	7.1
26...	0832	1.5	--	212	7.7	17.0	7.2
26...	0834	2.0	--	214	7.8	17.0	7.2
26...	0835	2.5	43	212	7.8	17.0	7.2
26...	0836	.0	43	212	7.8	17.0	7.2
411732124051803 REDWOOD CREEK ESTUARY SITE 3C NEAR ORICK							
MAY , 1974							
16...	1615	.0	--	131	--	16.5	--
16...	1616	2.1	--	131	--	16.5	--
17...	1505	2.1	41	--	6.9	--	--
SEP.							
20...	1115	.0	69	1080	7.8	15.5	9.6
20...	1116	1.5	--	2420	--	16.0	--
20...	1117	1.7	--	5440	--	16.0	--
20...	1118	2.5	--	21700	--	16.5	--
20...	1119	3.5	--	28200	--	19.0	--
20...	1120	4.5	89	31600	8.3	20.0	13.0
MAY , 1975							
25...	2315	1.0	--	713	7.4	21.0	8.2
25...	2318	1.5	--	724	7.3	21.0	7.7
25...	2321	2.0	--	734	7.3	21.0	7.7
25...	2324	2.5	--	734	7.2	21.0	7.6
25...	2325	3.0	--	767	7.2	21.0	7.4
25...	2328	3.5	--	778	7.1	21.0	7.4
25...	2330	4.0	--	864	6.9	21.0	7.0
26...	0845	1.0	--	506	7.5	18.0	6.9
26...	0846	1.5	--	498	7.5	18.0	6.8
26...	0847	2.0	--	499	7.5	18.0	6.9
26...	0848	2.5	--	501	7.5	18.0	6.9
26...	0849	3.0	--	515	7.5	18.0	6.9
26...	0850	3.5	--	516	7.5	18.0	6.9
26...	0851	4.0	--	520	7.5	18.0	7.0
26...	0852	4.5	--	518	7.3	18.0	6.8
411732124051804 REDWOOD CREEK ESTUARY SITE 3D NEAR ORICK							
MAY , 1974							
16...	1625	.0	--	135	--	16.0	--
16...	1626	3.0	--	128	--	15.5	--
16...	1627	5.9	--	129	--	15.0	--
17...	1510	.0	39	--	6.7	--	--
17...	1511	5.0	39	--	6.7	--	--
SEP.							
20...	1130	.0	--	2180	--	16.0	--
20...	1131	1.5	--	2420	--	16.0	--
20...	1132	2.0	--	13000	--	17.0	--
20...	1133	2.5	--	21500	--	19.0	--
20...	1134	3.5	--	27100	--	19.0	--
20...	1135	4.5	--	31600	--	19.0	--
20...	1136	5.5	--	41000	--	22.5	--

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	INSTANTANEOUS DISCHARGE (FT ³ /S)	ALKALINITY CACO ₃ (MG/L)	SPECIFIC DUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DIS-						
							SOLVED OXYGEN (MG/L)						
11532600 WEST BRANCH MILL CREEK NEAR CRESCENT CITY													
JULY, 1974													
31...	1800	--	22	58	6.6	14.0	6.9						
AUG., 1974													
01...	0030	--	21	60	6.7	13.0	6.3						
01...	0500	--	21	60	6.8	13.0	6.4						
01...	0630	--	22	59	6.8	13.0	6.8						
01...	0900	--	22	62	6.7	13.0	6.6						
01...	1100	--	22	65	6.8	13.0	6.8						
DEC., 1974													
15...	2030	--	13	81	6.4	10.0	9.4						
MAY, 1975													
17...	2000	--	14	36	7.7	9.0	11.2						
17...	2200	--	17	35	--	9.0	11.1						
18...	0100	--	8	37	6.7	9.0	11.1						
18...	0430	--	8	36	7.3	9.0	11.1						
18...	0500	--	9	37	6.7	9.0	11.0						
18...	1145	--	6	26	6.8	9.5	--						
18...	1410	--	6	32	6.4	9.5	11.1						
18...	1500	--	--	37	6.6	9.5	--						
18...	1530	--	6	26	6.1	9.5	11.0						
18...	1700	--	6	32	6.3	9.5	10.4						
18...	1800	--	6	34	6.3	9.5	10.8						
11532602 WEST BRANCH MILL CREEK BELOW RED ALDER CAMPGROUND, NEAR CRESCENT CITY													
MAY, 1974													
G26...	1520	23	15	--	7.0	11.0	11.2						
JULY													
31...	1300	--	20	60	6.9	16.0	9.5						
31...	1400	--	--	59	6.9	16.0	9.5						
31...	1500	--	18	59	6.9	15.5	9.4						
31...	1600	--	18	--	6.9	16.0	8.9						
31...	1700	--	--	57	6.8	16.0	8.6						
31...	1800	--	20	56	6.9	16.0	8.8						
31...	1900	1.3	20	56	6.9	15.5	8.7						
31...	2000	--	20	--	6.8	15.5	--						
31...	2100	--	20	58	6.8	15.5	8.4						
31...	2200	--	20	59	6.9	15.0	8.4						
31...	2300	--	20	59	6.8	15.0	8.4						
31...	2400	--	20	59	7.0	15.0	8.4						
AUG.													
01...	0100	--	19	58	6.8	15.0	8.4						
01...	0200	--	20	59	6.9	14.5	8.4						
01...	0300	--	20	59	7.0	14.5	8.4						
01...	0400	--	20	59	7.0	14.5	8.4						
01...	0500	--	20	56	6.9	14.5	8.2						
01...	0600	--	20	58	6.8	14.5	8.3						
01...	0700	--	20	56	6.8	14.5	8.4						
01...	0800	1.4	20	57	7.0	14.5	8.6						
01...	0900	--	20	60	7.0	14.5	9.0						
01...	1000	A1.5	20	60	6.9	15.0	9.1						
01...	1100	--	19	59	7.0	15.5	9.2						
01...	1200	1.3	19	59	6.9	15.5	9.8						
01...	1210	1.3	--	51	--	15.5	--						
SEP.													
12...	1330	.54	--	78	--	15.0	--						
12...	1345	.53	20	62	6.9	15.0	8.8						
12...	1415	.54	21	62	6.9	15.0	--						
23...	1445	.45	18	64	6.8	14.0	8.7						

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	INSTAN- TANFOUS DIS- CHARGE (FT ³ /S)	ALKA- LINITY AS CACO ₃ (MG/L)	CON- DUCT- ANCE (MICRO- MHO)	SPE- CIFIC CON-	PH	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)
					DUCT- ANCE (MICRO- MHO)			
11532602 WEST BRANCH MILL CREEK BELOW RED ALDER CAMPGROUND, NEAR CRESCENT CITY--CONTINUED								
DEC., 1974								
06...	0110	20	--	51	--	9.5	--	
15...	2105	91	--	44	--	10.0	--	
JAN.								
06...	2235	--	15	54	7.5	9.0	10.4	
06...	2340	175	--	39	--	9.0	--	
07...	0930	--	11	57	7.2	9.0	10.2	
07...	1000	154	--	38	--	9.0	--	
07...	1045	--	10	54	6.8	9.0	10.3	
07...	1110	154	--	39	--	9.0	--	
07...	1405	--	10	50	7.2	9.5	10.6	
07...	1440	400	--	35	--	9.5	--	
07...	1840	--	8	45	6.8	9.5	10.3	
07...	1845	680	--	32	--	--	--	
07...	1900	680	--	38	--	9.5	--	
07...	2350	--	10	46	7.3	9.5	10.5	
08...	0450	--	9	51	7.1	9.0	10.8	
08...	0830	--	10	53	6.9	9.0	10.9	
08...	0900	375	--	39	--	9.0	--	
08...	0930	370	--	37	--	9.0	--	
MAR.								
17...	--	--	--	30	--	--	--	
17...	1730	--	--	32	--	9.0	--	
17...	1930	--	9	30	--	--	--	
JUNE								
05...	1435	--	15	47	5.9	14.5	9.7	
05...	1510	6.3	--	45	--	14.5	--	
05...	1530	6.3	13	47	5.9	15.0	--	
11532605 WEST BRANCH MILL CREEK AT BRIDGE, NEAR CRESCENT CITY								
DEC., 1974								
06...	0200	31	--	58	--	10.0	--	
15...	1945	120	--	49	--	11.0	--	
JAN., 1975								
06...	1800	--	11	44	6.8	9.5	10.4	
06...	2030	264	--	46	--	9.5	--	
07...	1040	--	10	41	6.3	9.5	10.4	
07...	1100	206	--	43	--	9.5	--	
07...	1220	--	--	42	--	10.0	--	
07...	1410	344	--	39	--	10.0	10.1	
07...	1530	508	--	42	6.5	10.0	--	
07...	1850	--	--	41	--	10.0	--	
07...	2100	876	--	38	7.0	10.0	10.6	
07...	2145	820	--	34	--	10.0	--	
08...	0430	--	9	42	6.8	10.0	10.1	
08...	0450	638	--	37	--	9.5	--	
08...	1155	486	--	39	6.7	9.5	10.2	
08...	1220	472	--	39	--	9.5	--	
MAR.								
17...	1530	446	--	40	6.3	9.0	11.1	
17...	1540	446	--	35	--	9.0	--	
17...	1730	645	--	34	--	9.0	--	
18...	0030	--	10	39	6.3	9.0	10.7	
18...	0120	820	--	36	--	9.0	--	
18...	0330	--	12	39	6.5	9.0	10.8	
18...	0710	1070	--	34	--	9.0	--	
18...	1030	--	11	34	6.7	--	11.0	
18...	1230	1570	--	29	--	--	--	
18...	1600	1710	--	33	6.6	9.5	11.2	
18...	1630	1690	--	31	--	9.5	--	
18...	2240	1080	--	33	--	--	--	
19...	0900	663	--	37	--	--	--	
19...	1000	631	--	44	6.4	9.0	11.0	

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	INSTANTANEOUS CHARGE (FT ³ /S)	ALKALINITY AS CACO ₃ (MG/L)	DUCTANCE (MICRO-MHOS)	SPE-CIFIC CON-	PH	TEMPERATURE (DEG C)	DIS-SOLVED OXYGEN (MG/L)
					CON-			
11532610 EAST FORK MILL CREEK NEAR CRESCENT CITY								
MAY, 1974								
21...	0905	--	21	57	6.8	10.5	11.0	
JULY,								
31...	1210	--	23	62	7.6	18.0	9.4	
31...	1400	--	23	64	7.3	18.5	9.1	
31...	1510	--	--	--	--	19.0	9.0	
31...	1600	--	22	68	7.3	20.0	9.0	
31...	1700	--	--	--	--	19.5	8.9	
31...	1820	--	22	73	7.4	19.0	8.9	
31...	1900	--	--	--	--	19.0	8.8	
31...	2000	--	22	74	7.3	19.0	8.8	
31...	2100	--	--	--	--	19.0	8.6	
31...	2200	--	23	62	7.0	19.0	8.5	
AUG.								
01...	0030	--	23	65	7.2	18.5	8.4	
01...	0100	--	--	--	--	18.5	8.3	
01...	0200	--	24	60	7.2	18.5	8.4	
01...	0420	--	23	60	7.2	18.0	8.4	
01...	0615	A3.9	21	64	6.9	17.5	8.5	
01...	0815	--	21	62	7.0	17.5	8.6	
01...	0900	--	--	--	--	18.0	8.9	
01...	1000	--	23	64	7.3	18.0	9.1	
01...	1100	--	--	--	--	18.0	9.3	
01...	1200	4.2	22	64	7.4	18.0	9.1	
01...	1210	--	--	60	--	15.5	--	
SEP.								
12...	1300	1.9	25	66	7.0	16.5	--	
12...	1315	A1.9	--	66	7.0	16.5	9.3	
12...	1325	1.9	--	67	--	16.5	--	
23...	1300	1.8	25	70	7.3	15.0	--	
23...	1315	A1.8	26	71	7.3	15.0	10.0	
JUNE, 1975								
05...	1235	--	20	52	7.1	15.5	9.6	
05...	1315	17	17	55	7.1	15.5	--	
05...	1335	17	--	51	--	15.5	--	
11532615 EAST FORK MILL CREEK AT BRIDGE NEAR CRESCENT CITY								
DEC., 1974								
06...	0350	37	--	87	--	10.0	--	
15...	1900	--	26	75	6.7	11.0	9.8	
15...	2125	149	--	57	--	10.5	--	
JAN., 1975								
06...	1800	--	13	44	6.2	--	10.9	
06...	1810	460	--	42	--	10.0	--	
07...	0945	--	16	45	6.3	9.5	10.7	
07...	1130	353	--	42	--	9.5	--	
07...	1645	930	--	38	--	10.0	--	
07...	1750	1070	14	42	6.5	10.0	10.5	
07...	2315	1030	13	43	--	9.5	--	
07...	2355	1000	--	38	--	10.0	--	
08...	0025	--	19	47	6.9	9.5	10.5	
08...	0515	--	14	--	6.8	--	10.5	
08...	0540	798	--	40	--	9.5	--	
08...	1300	640	--	40	--	9.0	--	
08...	1330	640	15	42	6.9	9.0	10.6	

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	INSTANTANEOUS DISCHARGE (FT ³ /S)	ALKALINITY CHARGE (MG/L)	SPECIFIC CONDUCTANCE (CACO ₃ MHOS)	DUCTANCE (MICRO-OMHOS)	PH (UNITS)	TEMPERATURE (DFG C)	DTS SOLVED OXYGEN (MG/L)
11532615 EAST FORK MILL CREEK AT BRIDGE NEAR CRESCENT CITY--CONTINUED								
MAR., 1975								
17...	1430	780	--	38	--	9.0	--	
17...	1630	435	15	42	6.4	9.0	11.1	
17...	1845	--	17	39	7.7	8.5	11.2	
17...	2120	--	16	45	7.0	8.5	11.4	
17...	2220	980	--	40	--	8.5	--	
18...	0100	--	14	41	6.6	8.5	11.2	
18...	0250	1080	--	37	--	--	--	
18...	0400	--	15	39	6.9	9.0	11.2	
18...	0750	1820	--	33	--	--	--	
18...	0900	--	13	37	6.9	9.0	11.1	
18...	1420	3300	--	28	--	--	--	
18...	1530	3130	12	41	6.8	9.0	11.5	
18...	2300	1540	--	33	--	--	--	
19...	0900	910	13	42	6.5	9.0	11.3	
19...	1210	925	--	34	--	9.0	--	
11532620 MILL CREEK NEAR CRESCENT CITY								
FEB., 1974								
G15...	1515	78	16	46	6.7	9.0	--	
G19...	1530	905	28	38	6.8	10.0	10.9	
G19...	1615	890	13	40	6.9	10.0	--	
MAR.								
G26...	1030	95	--	43	--	11.0	--	
G26...	1035	--	18	--	7.2	11.0	11.6	
G26...	1200	95	15	47	7.2	--	--	
G27...	1545	111	--	44	--	10.5	--	
G27...	2115	152	--	44	--	10.0	--	
G28...	0745	157	--	46	--	9.5	--	
G28...	0950	152	--	47	--	10.0	--	
G28...	1000	A153	16	50	7.2	--	--	
G28...	1045	--	18	--	7.1	10.0	11.2	
APR.								
G01...	1330	2010	--	34	--	10.0	--	
G02...	1420	889	--	37	--	10.0	--	
MAY								
15...	1345	29	--	50	--	--	--	
20...	1310	--	18	56	6.7	12.0	11.2	
20...	1430	--	--	49	--	--	--	
JUNE								
26...	1230	12	--	59	--	14.0	--	
JULY								
31...	1200	--	26	66	7.2	20.0	9.1	
31...	1310	A7.2	21	63	6.5	21.0	9.1	
31...	1410	--	24	64	6.9	22.0	9.1	
31...	1510	--	22	63	7.2	22.5	9.2	
31...	1600	--	23	62	7.2	23.0	9.1	
31...	1700	--	22	63	7.2	23.0	8.8	
31...	1800	--	22	62	7.1	23.0	8.5	
31...	1900	--	23	63	7.1	22.0	8.5	
31...	2000	--	22	64	7.1	22.0	8.3	
31...	2100	--	24	63	7.1	21.5	8.0	
31...	2200	--	22	64	7.3	21.0	7.9	
31...	2300	--	22	66	7.0	20.0	7.8	
31...	2400	--	24	66	6.9	20.0	--	
AUG.								
01...	0100	--	--	64	7.0	20.0	7.8	
01...	0200	--	23	65	6.9	19.5	8.0	
01...	0300	--	--	65	6.9	19.5	7.9	

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	INSTAN- TANFOUS DIS- CHARGE (FT ³ /S)	ALKA- LINITY CACO ₃ (MG/L)	SPF- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)							
							DIS-	SOLVED						
11532620 MILL CREEK NEAR CRESCENT CITY--CONTINUED														
AUG., 1974														
01...	0400	--	24	66	6.9	19.0	8.0							
01...	0500	--	--	64	6.8	19.0	8.0							
01...	0600	--	24	65	7.0	18.5	8.0							
01...	0700	--	--	65	6.9	18.5	8.2							
01...	0800	--	24	65	7.1	18.5	8.2							
01...	0900	--	--	64	7.0	18.5	8.5							
01...	1000	--	24	64	7.0	18.5	8.8							
01...	1100	--	--	64	7.0	19.0	9.0							
01...	1150	7.2	--	63	--	20.0	--							
01...	1200	7.2	27	63	7.1	20.0	9.2							
SEP.														
12...	1115	--	26	80	7.5	16.0	8.8							
12...	1200	3.5	26	88	7.5	16.0	--							
23...	1100	3.7	25	74	7.4	15.5	--							
23...	1120	3.6	26	77	7.4	15.5	9.7							
OCT.														
02...	1250	2.5	--	74	--	13.5	--							
NOV.														
12...	1350	8.6	--	68	--	9.7	--							
DEC.														
05...	2245	--	19	60	6.3	10.0	9.9							
05...	2300	92	--	62	--	10.0	--							
15...	1730	--	16	42	7.1	11.0	10.2							
15...	1805	324	--	49	--	10.5	--							
JAN., 1975														
06...	1715	--	16	43	6.9	9.5	10.1							
06...	1830	800	--	42	--	9.5	--							
07...	0800	--	--	41	6.8	9.5	10.9							
07...	0840	562	--	43	--	9.5	--							
07...	1255	714	--	40	--	9.5	--							
07...	1500	1020	12	41	6.7	9.5	10.5							
07...	1730	1610	--	35	--	9.5	--							
07...	2025	1880	11	37	--	9.5	--							
07...	2100	--	13	40	6.8	9.5	10.7							
07...	2205	1790	--	37	--	9.5	--							
08...	0130	1570	--	38	--	9.5	--							
08...	0145	--	15	41	6.7	9.5	10.6							
08...	0335	1500	--	39	--	9.5	--							
08...	0730	--	14	44	6.7	9.0	11.0							
08...	0815	1270	--	39	--	9.0	--							
08...	0900	1240	11	41	--	9.0	--							
08...	1030	--	12	41	6.6	9.5	10.9							
08...	1325	1120	--	40	--	9.5	--							
08...	1125	69	--	51	--	5.0	--							
MAR.														
17...	1525	1320	--	37	--	--	--							
17...	1530	--	--	42	--	8.5	10.7							
17...	1545	1410	13	36	--	9.0	--							
17...	1740	1760	--	37	--	8.5	--							
17...	1945	1770	--	37	--	8.5	--							
18...	0050	1890	--	37	--	8.5	--							
18...	0100	--	11	44	6.3	9.0	11.3							
18...	0500	2000	12	43	6.9	9.5	10.8							
18...	0640	2410	--	37	--	9.5	--							
18...	0700	--	10	43	6.5	9.5	10.7							
18...	0900	--	8	39	6.7	10.0	10.8							
18...	0940	3260	--	32	--	--	--							
18...	1215	4070	--	30	--	9.5	--							
18...	1310	--	10	31	6.8	9.5	11.0							
18...	1515	4390	10	31	6.8	9.5	11.0							
18...	1600	4250	10	32	--	9.5	--							
18...	1845	3500	--	32	--	9.5	--							

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	INSTANTANEOUS DISCHARGE (FT ³ /S)	ALKALINITY AS CACO ₃ (MG/L)	SPF-CIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DIS-
							SOLVED OXYGEN (MG/L)
11532620 MILL CREEK NEAR CRESCENT CITY--CONTINUED							
MAR., 1975							
19...	1100	1420	17	42	6.1	9.0	11.0
19...	1430	1450	--	36	--	9.0	--
APR.							
02...	1140	123	--	42	--	8.5	--
MAY							
29...	1410	37	--	51	--	16.0	--
JUNE							
05...	1040	--	20	52	7.2	14.5	9.8
05...	1045	28	--	53	--	14.5	--
05...	1115	28	17	55	7.2	14.5	--
11532626 MILL CREEK AT BRIDGE, NEAR CRESCENT CITY							
DEC., 1974							
05...	2215	--	--	59	--	--	--
15...	1800	--	35	59	7.2	11.0	10.9
15...	1900	--	--	55	--	11.0	--
JAN., 1975							
06...	1730	--	12	52	6.3	10.0	11.7
06...	1945	900	--	42	--	10.0	--
07...	1545	--	12	45	6.8	10.0	10.8
07...	1615	1320	9	39	--	10.0	--
07...	2215	2150	12	44	6.6	9.5	11.0
08...	1150	--	12	46	6.6	9.0	11.2
08...	1220	1250	12	43	--	9.0	--
08...	1325	1200	--	39	--	9.0	--
MAR.							
17...	1515	1550	12	40	6.6	8.5	10.9
17...	1745	2050	--	37	--	--	--
17...	2200	--	13	38	7.0	8.5	10.8
18...	0835	--	11	39	6.8	9.0	10.9
18...	1025	4840	--	30	--	--	--
18...	1330	6150	8	26	--	9.5	--
18...	1615	7000	--	31	6.8	9.0	11.2
19...	1330	1530	18	36	6.8	8.5	12.1
19...	1410	1480	--	38	--	--	--
11532630 MILL CREEK AT MOUTH, NEAR CRESCENT CITY							
MAR., 1974							
G27...	1340	A126	15	--	7.2	10.5	11.6
MAY							
20...	1530	--	21	56	6.9	12.0	11.2
20...	1610	29	--	49	--	--	--
JULY							
29...	1145	--	--	44	7.6	18.0	--
31...	1230	--	--	--	--	19.5	9.1
31...	1300	--	--	64	7.4	20.0	9.2
31...	1415	--	23	64	7.5	20.0	9.1
31...	1500	--	--	66	--	20.0	9.2
31...	1530	--	--	--	7.5	--	--
31...	1600	--	20	66	7.4	20.0	9.2
31...	1700	--	--	67	7.5	20.0	9.2
31...	1800	--	26	67	7.5	19.5	9.0
31...	1900	--	25	66	7.5	19.5	8.9
31...	2000	--	25	67	7.4	19.0	8.8
31...	2115	--	23	67	7.3	19.0	8.7
31...	2200	--	26	67	7.4	19.0	8.7
31...	2300	--	27	67	7.4	19.0	8.7
31...	2400	--	26	67	7.4	19.0	8.6

TABLE 13.--Onsite determinations of water quality--Continued

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (FT ³ /S)	ALKA- LINITY CACO ₃ (MG/L)	CON- DUCT- ANCE MHOS)	SPF- CIFIC CON- DUCT- ANCE (MICRO- UNITS)	PH	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)
11532630 MILL CREEK AT MOUTH, NEAR CRESCENT CITY--CONTINUED								
AUG., 1974								
01...	0100	--	25	67	7.4	19.0	8.5	
01...	0200	--	--	67	7.4	18.5	8.6	
01...	0315	--	26	67	7.4	18.5	8.6	
01...	0400	--	--	66	7.4	18.5	8.5	
01...	0500	--	26	68	7.4	18.5	8.5	
01...	0555	--	--	68	7.3	18.0	8.6	
01...	0700	--	26	68	7.4	18.0	8.6	
01...	0800	--	--	67	7.4	18.0	8.8	
01...	0900	--	26	68	7.5	18.0	8.7	
01...	1000	--	--	67	7.6	18.5	9.1	
01...	1100	--	25	67	7.6	18.5	8.8	
01...	1200	7.0	25	68	7.6	22.5	9.0	
01...	1220	7.0	26	73	7.7	19.0	--	

Dissolved Solids

The major dissolved solids are electrically charged chemical elements or compounds. In fresh water, the major dissolved solids consist of the cations calcium, magnesium, sodium, and potassium, and the anions bicarbonate, carbonate, sulfate, chloride, and fluoride. Dissolved silica is also abundant in water but occurs partly in the nonionic form of silicon dioxide. In water-quality investigations, the concentrations of the major dissolved solids are determined to classify the water type and to provide information on water-quality changes. In addition, dissolved solids are a source of nutrients for aquatic plants and can influence their growth and production.

Water samples for major dissolved-solids determination (table 14) were collected at the estimated centroid of flow of each stream. In the Redwood Creek estuary, samples were collected at various depths with a horizontal Van Dorn-type sampler. Water samples for bicarbonate and carbonate analysis were neither filtered nor acidified. Water samples for the determination of all other major dissolved solids were passed through 0.45-micrometer membrane filters and acidified with nitric acid. The samples were shipped to the Geological Survey Central Laboratory at Salt Lake City, Utah, for analysis using methods described by Brown and others (1970).

Trace Elements

Trace elements are present in minute quantities in natural water and are reported in micrograms per liter ($\mu\text{g/l}$). Most trace elements are essential to life but may be both limiting and lethal factors to aquatic organisms. For example, copper in low concentrations is an essential trace element required for growth of aquatic plants, but it is toxic to plants in larger concentrations.

The water samples for selected trace-element analyses were collected at the estimated centroid of flow of each stream and passed through 0.45-micrometer membrane filters. The filtrate was acidified with nitric acid, shipped to the Geological Survey Central Laboratory at Salt Lake City, Utah, and analyzed using the methods described by Brown and others (1970). In this study, the trace elements aluminum, cadmium, copper, iron, lead, and zinc were determined (table 14). These elements were included in the study because of their importance to aquatic biota (Day, 1963; Greeson, 1969).

Nitrogen and Phosphorus

Nitrogen and phosphorus compounds are required by all organisms for growth and reproduction. While there are other essential plant nutrients, nitrogen and phosphorus are the most common nutrients in natural water that can occur in growth-limiting concentrations. In contrast, nonlimiting quantities of nitrogen and phosphorus may result in rapid plant production and cause nuisance conditions.

Water samples for nitrogen and phosphorus determinations were collected at the estimated centroid of flow of each stream and passed through 0.45-micrometer membrane filters. The filtered water samples were placed in polyethylene bottles, packed in ice, shipped to the Geological Survey Central Laboratory at Salt Lake City, Utah, and analyzed for nitrogen and phosphorus using the methods described by Brown and others (1970). The compounds of nitrogen and phosphorus determined in this study (table 14) include nitrate, nitrite, Kjeldahl nitrogen, ammonia, organic nitrogen, phosphorus, and orthophosphorus.

Organic Carbon

Carbonaceous material which has been a part of living tissue is classified as organic carbon. Organic carbon in water can be dissolved or suspended. Dissolved organic carbon consists primarily of proteins, carbohydrates, fats, and vitamins. Suspended organic carbon consists of living or dead material, either fragmented or whole. The organic-carbon concentration in water is determined to obtain an indication of the biological productivity and the amount of potential chemical energy transported by water.

Water samples for organic-carbon analysis were collected in a glass bottle at the estimated centroid of flow of each stream. A measured volume of water from each sample was passed through a 0.45-micrometer silver-membrane filter using a stainless steel filtering unit. The filtrate was collected in a glass septum bottle, and the silver filter was placed in a polyethylene vial (R. L. Malcolm and P. W. McKinley, written commun., 1972). The filtrate and filter containers were iced, shipped to the Geological Survey Central Laboratory at Salt Lake City, Utah, and analyzed (table 14) using the procedures described by Goerlitz and Brown (1972, p. 4).

In addition to water samples, samples of streambed materials were collected in the Redwood Creek estuary for organic-carbon analysis. An Ekman dredge was used to collect each sample at the selected sampling stations (fig. 4). After collection, the streambed-material samples were placed in polyethylene bottles, packed in ice, shipped to the Geological Survey Central Laboratory at Salt Lake City and analyzed (table 15) by the Leco total carbon and modified Van Slyke methods (J. A. Leenheer, written commun., 1974).

TABLE 14.--Chemical analyses

[See figures 2, 3, and 4 for location of sampling
 collected with a horizontal Van Dorn type
 indicates auxiliary data collected prior to
 thus precedes April 11, 1974, the beginning]

DATE	TIME	INSTAN-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-
		TANOUS	SOLVED	SOLVED	SOLVED	SOLVED	MAG-	SOLVED	Po-	SOLVED	RICAH-
		CHARGE	(SiO ₂)	(Al ₂ O ₃)	(Al)	(Fe)	(Ca)	(Mg)	(Na)	(K)	(HC0 ₃)
		(FT ³ /S)	(MG/L)	(UG/L)	(UG/L)	(UG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)
11482140 HIGH SLOPE SCHIST CREEK NEAR ORICK											
JULY, 1974											
23...	1145	.20	7.1	0	30	9.2	1.0	3.4	.4	37	0
11482160 COPPER CREEK NEAR ORICK											
APR., 1974											
16...	1400	4.4	6.3	30	80	9.2	1.5	3.2	.6	29	0
11482200 REDWOOD CREEK AT SOUTH PARK BOUNDARY, NEAR ORICK											
JUN. Y, 1974											
19...	1200	40	5.1	20	30	30	2.4	2.9	.8	88	0
22...	1230	35	5.0	50	50	32	2.6	3.9	1.0	91	0
SEP.											
11...	1315	11	4.0	0	20	40	4.3	4.8	1.5	103	0
13...	1300	10	4.1	10	20	40	2.9	4.8	1.3	104	1
JUNE, 1975											
03...	1415	195	5.4	30	80	18	2.0	2.8	.7	57	0
10...	1145	141	5.5	10	30	21	1.7	3.2	.7	63	0
11482210 BRIDGE CREEK NEAR ORICK											
APR., 1974											
26...	1105	31	5.1	--	190	9.4	.8	3.6	.5	30	0
JULY											
23...	1230	4.2	5.4	0	160	22	2.4	4.2	.7	61	0
11482225 HARRY WIER CREEK NEAR ORICK											
APR., 1974											
12...	1530	12	7.5	40	130	6.0	1.3	3.7	.7	20	0
JULY											
19...	1200	.43	6.0	20	30	12	2.1	4.4	.7	47	0
23...	1345	.34	5.8	0	30	13	2.0	5.1	.8	47	0
SEP.											
11...	1200	A.04	5.5	10	80	16	3.7	6.3	.9	58	0
14...	1330	A.17	5.6	10	70	16	2.6	6.5	.7	59	0
NOV.											
07...	0455	.24	4.9	0	50	18	3.1	5.9	.8	56	--
07...	0555	.41	4.8	0	30	21	2.5	5.6	.6	56	--
07...	0655	.60	4.7	0	10	18	2.8	5.5	.6	55	--
07...	0755	1.1	4.6	0	40	18	2.3	5.4	.0	51	--
07...	0855	1.7	4.6	0	10	17	2.7	5.3	1.0	51	--
07...	0955	2.4	4.6	0	40	15	2.7	5.1	1.5	48	--
07...	1055	3.0	4.5	10	20	14	2.2	4.9	1.0	44	--
07...	1155	4.6	4.6	0	50	14	2.7	5.1	.9	46	--
07...	1255	7.5	4.8	10	30	15	2.4	5.2	.5	44	--
07...	1355	9.2	5.0	20	20	15	2.6	5.3	1.0	45	--
07...	1455	2.3	5.2	10	20	15	2.3	5.6	.9	47	--
07...	1555	2.2	5.3	10	20	16	2.4	5.6	.8	47	--
07...	1655	1.8	5.4	0	10	16	2.8	5.7	.6	47	--
07...	1755	1.0	5.4	0	20	14	2.7	5.6	.8	49	--
08...	0655	.82	5.4	0	10	15	2.7	5.8	.8	50	--

es of water samples

ng stations. Redwood Creek estuary samples were
sampler. G, preceding date of sample collection
establishment of station for this study, and
date of data released in this report)

	ALKALINITY	DIS-SOLVED SULFATE	DIS-SOLVED CHLORIDE	DIS-SOLVED FLUORIDE	DIS-SOLVED NITRATE	DIS-SOLVED NITRITE	DIS-SOLVED NITRATE PLUS	DIS-SOLVED AMMONIA	DIS-SOLVED ORGANIC	DIS-SOLVED KJEL.	DIS-SOLVED NITRO-	DIS-SOLVED PHOSPHORUS
	CACO ₃	(SO ₄)	(CL)	(F)	(N)	(N)	(N)	(N)	(N)	(N)	(N)	(P)
	DATE	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)
11482140 HIGH SLOPE SCHIST CREEK NEAR ORICK--CONTINUED												
JULY, 1974												
23...	29	3.0	2.3	--	.01	.00	.01	.04	.07	.11	.01	
11482160 COPPER CREEK NEAR ORICK--CONTINUED												
APR., 1974												
16...	25	4.5	1.8	.1	.11	.00	.11	--	--	.07	.02	
11482200 REDWOOD CREEK AT SOUTH PARK BOUNDARY, NEAR ORICK--CONTINUED												
JULY, 1974												
19...	73	21	2.7	--	.00	.00	.00	.03	.00	.00	.03	.03
22...	75	22	2.3	--	.01	.00	.01	.03	.00	.03	.01	
SEP.												
11...	84	29	3.8	--	.09	.00	.09	.02	.04	.06	1.0	
17...	87	29	3.4	--	.00	.00	.00	.00	.03	.03	.01	
JUNE, 1975												
03...	47	12	2.2	--	.01	.00	.01	.01	.01	.02	.02	.02
10...	52	14	2.4	--	.00	.00	.00	.00	.02	.02	.00	
11482210 BRIDGE CREEK NEAR ORICK--CONTINUED												
APR., 1974												
26...	23	7.4	3.2	.1	.01	.00	.01	--	--	.08	.01	
JULY												
23...	50	18	4.0	--	.00	.00	.00	.03	.00	.00	.01	
11482225 HARRY WIER CREEK NEAR ORICK--CONTINUED												
APR., 1974												
12...	16	3.3	4.3	.1	.08	.00	.08	--	--	.04	.12	
JULY												
19...	36	7.4	4.7	--	.01	.00	.01	.04	.00	.03	.03	.03
23...	39	7.6	4.8	--	.00	.00	.00	.00	.10	.10	.02	
SEP.												
11...	49	8.7	4.9	--	.01	.00	.01	.11	.06	.17	.01	
16...	51	9.9	5.7	--	.13	.00	.13	.26	.00	.20	.41	
NOV.												
07...	46	12	6.0	--	.05	.00	.05	.03	.18	.21	.03	
07...	46	11	5.7	--	.02	.00	.02	.02	.00	.02	.05	
07...	45	12	5.3	--	.01	.00	.01	.02	.00	.02	.05	
07...	42	11	5.1	--	.01	.00	.01	.02	.19	.21	.05	
07...	42	11	5.0	--	.07	.00	.07	.03	.20	.23	.04	
07...	39	10	5.0	--	.01	.00	.01	.01	.17	.18	.05	
07...	36	9.7	4.7	--	.01	.00	.01	.01	.22	.23	.04	
07...	38	10	4.9	--	.02	.00	.02	.01	.27	.28	.03	
07...	36	10	4.7	--	.01	.00	.01	.01	.12	.33	.02	
07...	37	11	5.2	--	.02	.00	.02	.01	.15	.16	.02	
07...	39	13	5.2	--	.09	.00	.09	.01	.25	.26	.07	
07...	39	13	5.2	--	.13	.00	.13	.01	.23	.24	.07	
07...	39	13	5.2	--	.03	.00	.03	.01	.21	.22	.06	
08...	40	13	5.2	--	.48	.00	.48	.01	.22	.23	.06	
08...	44	13	5.6	--	.01	.00	.01	.01	.19	.20	.06	

TABLE 14.--Chemical analyses

DATE	DIS-SOLVFD (MG/L)	DIS-SOLVED (MG/L)	DIS-SOLVED (AC-FT)	DIS-SOLVFD (TONS) (P)	DIS-SOLVED PER DAY	HARDNESS (CA+Mg) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	PERCENT SODIUM SODIUM ADSORPTION RATIO	SODIUM SARPA TENSION (MICRO- MOHS)	SPECIFIC CONDUCTANCE PH
11482140 HIGH SLOPE SCHIST CREEK NEAR ORICK--CONTINUED										
JULY, 1974										
23...	--	45	.06	.02	27	0	21	.3	80	7.5
11482160 COPPER CREEK NEAR ORICK--CONTINUED										
APR., 1974										
16...	.00	42	.06	.52	29	5	19	.3	69	7.4
11482200 REDWOOD CREEK AT SOUTH PARK BOUNDARY, NEAR ORICK--CONTINUED										
JULY, 1974										
19...	--	108	.15	11.7	85	13	7	.1	179	8.1
22...	--	114	.16	10.8	91	16	8	.2	196	7.2
SEP.										
11...	--	139	.19	4.13	120	13	8	.2	--	--
13...	--	138	.19	3.76	110	25	8	.2	250	8.4
JUNE, 1975										
03...	.01	71	.10	37.4	53	6	10	.2	123	7.4
10...	.02	80	.11	30.5	59	8	10	.2	137	7.3
11482210 BRIDGE CREEK NEAR ORICK--CONTINUED										
APR., 1974										
26...	.01	45	.06	3.77	27	?	22	.3	73	7.3
JULY										
23...	--	87	.12	.99	65	15	12	.2	152	7.1
11482225 HARRY WIER CREEK NEAR ORICK--CONTINUED										
APR., 1974										
12...	.03	37	.05	1.20	20	4	28	.4	92	--
JULY										
19...	--	61	.08	.07	39	0	20	.3	110	7.6
23...	--	62	.08	.06	41	2	21	.3	105	7.3
SEP.										
11...	--	75	.10	.01	55	8	20	.4	134	7.5
16...	--	76	.10	.03	51	2	22	.4	139	7.0
NOV.										
07...	--	79	.11	.05	58	12	18	.3	140	--
07...	--	79	.11	.09	63	17	16	.3	136	--
07...	--	76	.10	.12	56	11	17	.3	140	--
07...	--	73	.10	.22	54	13	17	.3	128	--
07...	--	72	.10	.33	54	12	17	.3	126	--
07...	--	68	.09	.44	49	9	18	.3	120	--
07...	--	63	.09	.51	44	8	19	.3	114	--
07...	--	65	.09	.61	46	8	19	.3	118	--
07...	--	64	.09	.60	47	11	19	.3	116	--
07...	--	67	.09	.58	48	11	19	.3	121	--
07...	--	71	.10	.56	47	9	20	.4	126	--
07...	--	72	.10	.43	50	11	19	.3	128	--
07...	--	72	.10	.35	51	13	19	.3	129	--
09...	--	77	.10	.21	56	16	18	.3	142	7.5
08...	--	73	.10	.16	49	8	20	.4	144	7.6

yses

of water samples--Continued

PH WTSI	DATE	CHEM- ICAL OXYGEN DEMAND	CHEM- ICAL OXYGEN DEMAND	DIS- SOL- VED CARBON (COP) (MG/L)	SUS- PENDED CARBON (C) (MG/L)	DIS- SOLVED ORGANIC CARBON (C) (MG/L)	DIS- SOLVED CATION MUM (CDI) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)	
		TEMPER- ATURE (DEG C)	LOW LEVEL) (MG/L)	LEVEL) (MG/L)	(MG/L)	(MG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	
11482140 HIGH SLOPE SCHIST CREEK NEAR ORICK--CONTINUED											
7.5	JULY 1974 23...	12.5	4	--	1.9	2.3	--	0	10	--	10
11482160 COPPER CREEK NEAR ORICK--CONTINUED											
7.4	APR. 1974 16...	10.5	--	--	1.8	--	--	1	3	--	20
11482200 REDWOOD CREEK AT SOUTH PARK BOUNDARY, NEAR ORICK--CONTINUED											
8.1	JULY 1974 19...	22.0	1	--	1.1	1.0	.1	0	5	--	0
7.2	22...	21.0	2	--	9.2	2.3	.1	1	31	--	10
--	SEP.										
8.4	11...	21.0	--	--	--	1.8	.1	1	0	--	10
	13...	19.0	2	--	.5	1.7	.0	1	2	--	10
7.4	JUNE 1975 03...	19.0	--	2	3.6	1.6	.1	1	0	4	0
7.3	10...	19.5	--	2	5.1	.6	.1	0	0	0	0
11482210 BRIDGE CREEK NEAR ORICK--CONTINUED											
8.3	APR. 1974 26...	9.0	--	--	2.4	4.2	.4	--	--	--	--
8.1	JULY 23...	17.5	4	--	7.9	.6	.1	1	5	--	0
11482225 HARRY WIER CREEK NEAR ORICK--CONTINUED											
--	APR. 1974 12...	10.0	--	--	--	1.4	--	0	4	--	50
8.6	JULY 19...	14.0	6	--	1.9	3.2	.2	0	2	--	10
8.3	23...	14.0	8	--	3.8	1.5	.1	1	4	--	0
--	SEP.										
8.0	11...	13.5	--	--	2.9	1.2	.3	0	4	--	30
8.6	16...	13.0	2	--	9.4	.7	--	1	0	--	10
--	NOV.										
8.7	07...	9.0	--	4	--	1.3	.2	1	1	3	0
8.7	07...	9.0	--	6	--	4.0	--	1	1	3	20
8.7	07...	9.0	--	4	--	.2	.8	1	1	4	20
8.7	07...	9.0	--	6	--	1.7	.3	1	1	3	20
8.7	07...	9.5	--	8	--	3.5	.3	1	1	4	20
8.7	07...	9.5	--	8	--	6.9	.4	1	0	1	50
8.7	07...	9.0	--	8	--	6.9	.4	1	1	4	20
8.7	07...	10.0	--	15	--	6.5	1.2	1	1	2	50
8.7	07...	10.0	--	15	--	6.7	1.6	0	2	2	20
8.7	07...	10.0	--	20	--	4.7	.9	0	1	3	20
8.7	07...	10.5	--	17	--	6.3	.3	1	1	2	10
8.7	07...	10.0	--	10	--	5.0	.4	0	1	2	90
8.7	07...	--	--	17	--	4.1	.2	0	1	2	70
8.5	07...	9.0	--	10	--	6.7	.2	0	1	0	20
8.8	08...	9.0	--	16	2.5	4.3	.3	0	4	29	20
8.8	08...	9.0	--	12	2.0	3.4	.1	1	0	2	20

TABLE 14.--Chemical analyses

DATE	TIME	INSTAN- TANEOUS DIS- CHARGE (FT ³ /S)	DIS- SOLVED SILICA (MG/L)	DIS- SOLVED ALUM- INUM (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	RICAR- BONATE (HCO ₃) (MG/L)	CAR- BONATE (CO ₃) (MG/L)
				DIS- SOLVED SILICA (MG/L)	DIS- SOLVED ALUM- INUM (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	RICAR- BONATE (HCO ₃) (MG/L)
11482225 HARRY WIER CREEK NEAR ORICK--CONTINUED											
FER., 1975											
06...	1045	31	6.0	60	50	4.3	.7	3.4	.5	18	--
07...	1615	27	6.4	30	20	4.3	.5	3.4	.3	18	--
04...	2000	20	6.4	40	70	4.6	.8	3.4	.5	14	--
08...	2100	22	6.4	40	10	6.2	1.1	3.3	.4	15	--
04...	2200	28	6.1	30	20	4.0	1.6	3.2	.6	16	--
08...	2300	36	5.8	40	20	4.5	1.1	3.2	.5	13	--
04...	2400	42	5.6	40	20	3.6	.9	3.1	.9	16	--
09...	0100	44	5.6	30	20	4.3	1.0	3.1	.5	14	--
09...	0200	42	5.6	40	20	5.0	.8	3.1	.5	15	--
00...	0300	41	5.7	40	30	3.7	.4	3.1	.6	15	--
09...	0400	40	5.7	50	40	4.1	.8	3.2	.6	15	--
00...	0500	39	6.1	40	60	4.0	1.0	2.9	.8	14	--
00...	0600	37	6.0	40	40	4.3	1.0	3.0	.9	17	--
09...	0800	33	6.1	40	30	4.7	1.1	3.2	.4	17	--
04...	1000	31	6.7	30	40	4.0	1.1	3.5	.8	18	--
JUNE											
01...	1500	1.9	6.1	20	50	9.5	1.9	4.4	.9	38	0
07...	1330	1.6	6.2	20	30	11	2.1	4.0	.7	43	0
11482230 TOM MCDONALD CREEK NEAR ORICK											
APR., 1974											
26...	1335	19	5.6	--	70	3.3	.5	3.6	.4	12	0
JULY											
23...	1515	2.5	5.9	40	40	4.6	1.0	3.9	.4	20	0
11482240 FORTYFOUR CREEK NEAR ORICK											
MAY , 1974											
08...	1500	6.4	6.2	--	220	2.7	.9	3.9	.5	14	0
JULY											
23...	1230	1.6	6.4	50	300	3.6	1.2	4.2	.6	19	0
11482250 MILLER CREEK NEAR ORICK											
APR., 1974											
25...	1100	1.0	6.9	30	70	3.9	.9	4.3	.7	20	0
JULY											
19...	1200	.02	7.3	20	30	6.4	2.2	4.2	1.0	38	0
24...	1300	E.05	7.1	10	40	8.6	2.2	5.7	1.0	38	0
SEP.											
11...	1200	A.04	6.8	20	50	12	.3	6.0	1.3	42	0
17...	1430	.03	6.7	10	30	8.2	2.4	5.7	.8	42	0
MAY , 1975											
31...	1510	.70	6.6	40	80	4.0	1.0	4.5	1.1	22	0
JUNE											
06...	1530	.57	6.3	30	40	4.3	1.7	4.3	.8	22	0
11482260 MILLER CREEK AT MOUTH, NE/R ORICK											
APR., 1974											
11...	1600	6.0	7.5	30	100	3.9	1.1	3.5	.9	17	0
JULY											
14...	1200	A.12	5.9	30	30	9.5	1.9	4.2	.8	34	0
24...	1030	.16	5.8	10	30	7.4	1.6	5.4	.8	35	0
SEP.											
11...	1100	A.03	5.8	0	20	7.5	3.2	5.7	1.3	39	0
17...	1200	.05	5.8	30	50	8.9	2.6	6.3	.7	39	0
MAY , 1975											
31...	1150	.98	6.0	20	30	5.3	1.6	4.6	1.0	23	0
JUNE											
06...	1300	.90	5.8	20	30	5.8	2.0	4.4	.8	25	0

ses of water samples--Continued

R-	ATF	ALKALINITY AS CACO ₃ (MG/L)	DIS-SOLVED SULFATE (SO ₄) (MG/L)	DIS-SOLVED CHLORIDE (Cl) (MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED NITRATE (NO ₃) (MG/L)	DIS-SOLVED NITRITE (NO ₂) (MG/L)	DIS-SOLVED PLUS NITRATE (NO ₃) (MG/L)	DIS-SOLVED AMMONIA GEN (NH ₃) (MG/L)	DIS-SOLVED ORGANIC NITRO- GEN (N) (MG/L)	DIS-SOLVED KJEL. NITRO- GEN (N) (MG/L)	DIS-SOLVED VFD- PHOS- PHORUS (P) (MG/L)
DATE												
11482225 HARRY WIER CREEK NEAR ORICK--CONTINUED												
FEB., 1975												
--	06...	15	1.5	3.8	--	.60	.00	.60	.00	.10	.10	.01
--	07...	15	1.3	2.7	--	.08	.00	.08	.00	.12	.12	.00
--	08...	11	1.5	3.8	--	.04	.00	.05	.05	.01	.06	.00
--	08...	12	1.4	3.4	--	2.2	.01	2.2	.00	.11	.11	.00
--	08...	13	1.3	3.5	--	.23	.00	.23	.00	.22	.22	.00
--	08...	11	1.5	3.2	--	.15	.00	.15	.01	.10	.11	.00
--	08...	13	1.4	3.5	--	.08	.00	.08	.01	.12	.13	.03
--	09...	16	1.4	3.3	--	.12	.00	.12	.00	.15	.15	.00
--	09...	12	1.6	3.5	--	.20	.00	.20	.00	.10	.10	.02
--	09...	12	1.6	3.8	--	.08	.00	.09	.00	.09	.09	.03
--	09...	14	1.8	4.3	--	.08	.00	.08	.01	.13	.14	.02
--	09...	11	2.0	3.5	--	.46	.00	.47	.00	.10	.10	.02
--	09...	14	1.4	2.6	--	.14	.00	.14	.00	.09	.09	.02
--	09...	14	1.4	2.5	--	.05	.04	.09	.00	.14	.14	.02
--	09...	15	1.4	3.0	--	.27	.03	.30	.00	.14	.14	.01
JUNE												
0	01...	31	5.2	4.1	--	.01	.00	.01	.01	.07	.08	.01
0	07...	35	5.6	3.8	--	.00	.00	.00	.01	2.9	2.9	.00
11482230 TOM MCDONALD CREEK NEAR ORICK--CONTINUED												
APR., 1974												
0	26...	14	3.1	4.0	.0	.01	.00	.01	--	--	.03	.01
0	JULY											
0	23...	16	4.5	4.7	--	.00	.00	.00	.05	.01	.06	.01
11482240 FORTYFOUR CREEK NEAR ORICK--CONTINUED												
MAY, 1974												
0	08...	12	2.4	4.9	.1	.01	.00	.01	--	--	.08	.02
0	JULY											
0	23...	16	2.4	5.2	--	.00	.00	.00	.05	.07	.12	.01
11482250 MILLER CREEK NEAR ORICK--CONTINUED												
APR., 1974												
0	25...	19	2.2	4.2	.1	.01	.00	.01	--	--	.11	.02
0	JULY											
0	19...	32	1.9	4.2	--	.04	.00	.04	.06	.00	.05	.05
0	24...	34	1.9	4.2	--	.11	.00	.11	.00	.00	.00	.03
0	SEP.											
0	11...	43	2.0	3.9	--	.00	.08	.08	.00	.10	.10	.02
0	17...	35	2.3	4.7	--	.09	.00	.03	.01	.18	.19	.05
0	MAY, 1975											
0	31...	16	1.4	4.0	--	.08	.00	.08	.01	.06	.07	.02
0	JUNE											
0	06...	18	1.5	4.2	--	.00	.00	.00	.00	3.2	3.2	.02
11482260 MILLER CREEK AT MOUTH, NEAR ORICK--CONTINUED												
APR., 1974												
0	11...	15	2.3	3.9	.0	.06	.00	.06	--	--	.02	.01
0	JULY											
0	19...	28	4.7	4.9	--	.01	.00	.01	.05	.06	.11	.02
0	24...	24	4.6	4.6	--	.02	.00	.02	.00	.00	.00	.01
0	SEP.											
0	11...	32	5.5	5.1	--	.01	.00	.01	.03	.01	.04	.01
0	17...	35	3.5	5.9	--	.03	.00	.03	.11	.02	.13	.03
0	MAY, 1975											
0	31...	19	2.3	4.9	--	.02	.00	.02	.01	.05	.06	.01
0	JUNE											
0	06...	21	4.5	4.4	--	.01	.00	.01	.00	3.3	3.3	.01

TABLE 14.--Chemical analyses

	DIG-S SOLVENT ORTHO. PHOS- PHORUS (P)	DIG-S SOLVENT SOLVENT (SUM OF CONSTITUENTS) (MG/L)	DIG-S SOLVENT (TONS PER DAY)	DIG-S HARD- NESS (CA+Mg) (MG/L)	NON-CAR- BONATE HARD- NESS (MG/L)	SODIUM PERCENT SODIUM (MG/L)	SPF- CFCIC AD- SORP- TTON RATIO	CONE- DUCT- ANCE (MCHG- MHSO)	PH (UNITS)
DATE	(MG/L)	(MG/L)	AC-FT)	(MG/L)	(MG/L)				
11482225 HARRY WIER CREEK NEAR ORICK--CONTINUED									
FEb., 1975									
06...	--	32	.04	2.68	14	0	34	.4	49
07...	--	28	.04	2.04	13	0	36	.4	47
08...	--	28	.04	1.51	15	3	32	.4	47
08...	--	34	.05	2.32	20	8	26	.3	48
08...	--	29	.04	2.14	17	3	24	.3	45
08...	--	27	.04	2.62	16	5	30	.4	44
08...	--	27	.04	3.06	13	0	33	.4	42
09...	--	27	.04	3.21	15	1	30	.4	40
09...	--	28	.04	3.18	16	1	29	.3	42
09...	--	27	.04	2.99	11	0	37	.4	42
09...	--	29	.04	3.13	14	2	32	.4	42
09...	--	29	.04	3.05	14	1	29	.3	44
09...	--	29	.04	2.90	15	1	29	.3	44
09...	--	28	.04	2.49	16	2	29	.3	45
09...	--	30	.04	2.51	15	0	13	.4	46
JUNE									
01...	.02	51	.07	.26	32	0	23	.3	87
07...	.01	55	.07	.24	36	1	19	.3	91
11482230 TOM MCDONALD CREEK NEAR ORICK--CONTINUED									
APR., 1974									
26...	.01	27	.04	1.39	10	0	42	.5	39
JULY									
23...	--	35	.05	.24	16	0	35	.4	57
11482240 FORTYFOUR CREEK NEAR ORICK--CONTINUED									
MAY, 1974									
08...	.02	29	.04	.50	10	0	43	.5	42
JULY									
23...	--	33	.04	.14	14	0	38	.5	54
11482250 MILLER CREEK NEAR ORICK--CONTINUED									
APR., 1974									
25...	.01	31	.04	.09	13	0	40	.5	52
JULY									
19...	--	47	.06	.00	26	0	25	.4	77
24...	--	50	.07	.01	31	0	28	.4	79
SFP,									
11...	--	53	.07	.01	31	0	28	.5	100
17...	--	52	.07	.01	30	0	28	.5	93
MAY, 1975									
31...	.02	34	.05	.06	14	0	39	.5	55
JUNE									
06...	.01	34	.05	.05	18	0	33	.4	57
11482260 MILLER CREEK AT MOUTH, NEAR ORICK--CONTINUED									
APR., 1974									
11...	.00	32	.04	.52	14	0	33	.4	50
JULY									
19...	--	49	.07	.02	32	4	22	.3	80
24...	--	48	.07	.02	25	0	31	.5	84
SFP,									
11...	--	53	.07	.00	32	0	27	.4	95
17...	--	53	.07	.01	33	1	24	.5	109
MAY, 1975									
11...	.02	37	.05	.10	20	1	32	.5	65
JUNE									
06...	.02	40	.05	.10	23	2	29	.4	64

yses

of water samples--Continued

PH NITS)	DATE	CHEM- ICAL OXYGEN DEMAND TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW LEVEL)	DIS- SOL- VED DISSO- CATION (CO ₂)	SUS- PENDED CARBON (mg/L)	DIS- SOLVED ORGANIC CARBON (C) (mg/L)	SUS- PENDED ORGANIC CARBON (C) (mg/L)	DIS- SOLVED CADMIUM (CD) (ug/L)	DIS- SOLVED COPPER (CU) (ug/L)	DIS- SOLVED LEAD (Pb) (ug/L)	DIS- SOLVED ZINC (Zn) (ug/L)
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
11482225 HARRY WIER CREEK NEAR ORICK--CONTINUED											
7.1	06...	8.0	--	10	2.3	--	--	0	1	1	7
7.0	07...	10.0	--	6	2.9	2.7	.2	0	1	1	10
7.2	08...	9.5	--	1	1.4	4.5	.2	1	1	0	10
7.2	08...	9.5	--	1	1.5	4.2	.4	1	2	1	20
7.2	08...	9.5	--	4	1.6	4.2	.5	1	2	1	0
7.1	08...	9.5	--	6	1.3	4.3	.7	2	1	1	0
7.1	08...	9.5	--	8	2.0	3.9	.9	1	1	1	0
7.1	09...	9.0	--	7	1.8	4.3	1.1	2	1	0	0
7.2	09...	9.0	--	7	1.5	6.4	.5	2	2	0	10
7.2	09...	9.0	--	7	1.5	4.0	.3	1	1	2	7
7.0	09...	9.0	--	7	2.4	4.0	.6	1	2	4	0
7.2	09...	9.0	--	8	1.4	5.2	.4	1	2	6	10
7.2	09...	9.0	--	9	1.7	3.8	.3	0	1	9	7
7.1	09...	9.0	--	4	2.2	3.4	.1	0	1	6	0
7.1	09...	--	--	7	2.3	3.9	.2	0	2	3	7
JUNE											
7.2	01...	12.5	--	4	3.8	.7	.1	0	0	10	10
7.2	07...	12.0	--	6	4.3	1.2	.1	0	1	2	0
11482230 TOM MCDONALD CREEK NEAR ORICK--CONTINUED											
APR., 1974											
7.1	26...	9.0	--	--	1.5	3.4	--	--	--	--	--
JULY											
7.3	23...	16.5	6	--	1.6	1.8	.1	1	4	--	0
11482240 FORTYFOUR CREEK NEAR ORICK--CONTINUED											
MAY , 1974											
6.5	08...	11.5	--	--	7.1	1.4	--	--	--	--	--
JULY											
7.2	23...	13.0	8	--	1.9	1.5	.1	1	5	--	0
11482250 MILLER CREEK NEAR ORICK--CONTINUED											
APR., 1974											
7.2	25...	7.5	--	--	2.0	2.6	.4	0	2	--	10
JULY											
7.3	19...	14.0	53	--	3.0	5.7	.1	0	0	--	10
6.4	24...	15.0	5	--	7.7	1.6	.2	1	8	--	10
SEP.											
7.4	11...	13.0	--	--	2.7	3.6	.1	0	1	--	10
7.2	17...	12.0	12	--	4.2	1.5	.1	1	1	--	0
MAY , 1975											
7.4	31...	15.0	--	2	1.4	1.6	.1	1	0	4	20
JUNE											
7.1	06...	13.5	--	3	2.8	.9	.1	0	0	3	0
11482260 MILLER CREEK AT MOUTH, NEAR ORICK--CONTINUED											
APR., 1974											
7.2	11...	12.0	--	--	1.7	2.0	--	0	10	--	20
JULY											
7.2	19...	13.5	2	--	3.4	3.4	.1	0	2	--	10
6.9	24...	13.0	8	--	7.0	1.5	.3	1	5	--	0
SEP.											
7.4	11...	13.0	--	--	2.5	7.7	.1	0	1	--	10
6.6	17...	12.0	2	--	15	1.0	.1	1	2	--	10
MAY , 1975											
7.5	31...	12.0	--	2	1.2	.9	.1	1	0	6	10
JUNE											
7.1	06...	12.0	--	7	3.2	2.0	.1	0	1	1	0

TABLE 14.--Chemical analyses

DATE	TIME	INSTANTANEOUS	DIS-SOLVED	DIS-SOLVED	DIS-SOLVED	DIS-SOLVED	DIS-SOLVED	DIS-SOLVED	DIS-SOLVED	DIS-SOLVED	DIS-SOLVED	DIS-SOLVED
		CHARGE (FT ³ /S)	SILICA (MG/L)	ALUMINUM (AL) (SI02)	IRON (FE)	CALCIUM (CA)	NEONIUM (NG)	SODIUM (NA)	POSSUM (KI)	TASER (HCO3)	BICARONATE (MG/L)	CARONATE (CO3)
11482270 BOND CREEK NEAR ORICK												
MAY , 1974 08...	1615	3.3	6.3	--	90	2.9	.9	4.1	.4	14	0	
11482300 ELAM CREEK NEAR ORICK												
MAY , 1974 09...	1310	3.9	5.6	--	360	3.2	1.0	4.8	.6	13	0	
11482310 MCARTHUR CREEK NEAR ORICK												
MAY , 1974 09...	1440	6.7	6.3	40	160	2.2	1.4	6.6	.7	12	0	
11482320 LOW-SLOPE SCHIST CREEK NEAR ORICK												
MAY , 1974 10...	0930	.33	6.5	--	170	1.9	.8	5.1	.4	8	0	
11482330 HAYES CREEK NEAR ORICK												
JULY, 1974 27...	1430	.03	7.2	40	40	10	2.5	7.1	.7	41	0	
11482450 LOST MAN CREEK NEAR ORICK												
JULY, 1974 19...	1230	.81	7.9	20	20	8.3	1.7	3.8	.7	38	0	
22...	1310	.56	7.9	0	20	8.3	1.9	4.8	.7	39	0	
SEP.												
11...	1200	.21	7.9	0	30	13	4.0	4.9	1.3	57	0	
15...	1100	.22	7.9	0	20	13	3.0	6.8	1.4	58	0	
JUNE, 1975												
02...	1170	3.1	6.4	30	40	5.6	1.4	4.1	.5	25	0	
08...	1200	2.5	6.2	20	30	5.7	1.5	4.1	.6	23	0	
11482460 LARRY DAMM CREEK NEAR ORICK												
JULY, 1974 27...	1030	.58	14	10	590	5.6	3.4	6.2	.8	39	0	
11482468 LITTLE LOST MAN CREEK AT SITE NO. 2, NEAR ORICK												
JULY, 1974 14...	1200	.44	7.7	20	40	5.1	1.7	4.8	.6	29	0	
22...	1300	.41	7.6	20	20	4.4	1.9	5.5	.6	28	0	
SEP.												
11...	1200	.31	7.2	0	50	5.9	2.2	5.9	1.1	31	0	
15...	1400	.20	7.0	10	10	5.7	3.4	6.1	1.3	31	0	
NOV.												
07...	0535	.29	6.2	0	10	6.7	2.1	5.6	.5	28	0	
07...	0675	.41	6.1	0	10	6.1	2.1	5.7	1.0	28	0	
07...	0735	.56	6.1	10	10	6.5	2.1	5.5	1.1	28	0	
07...	0835	.74	6.2	0	20	5.9	1.7	5.9	1.0	28	0	
07...	0935	.40	6.3	20	20	6.8	2.0	6.0	.6	28	0	
07...	1100	1.2	6.3	30	50	6.9	2.0	6.2	.8	27	0	
07...	1200	1.4	6.4	20	30	7.6	2.1	6.0	.6	27	0	
07...	1300	1.5	6.5	20	60	7.6	1.3	6.0	.8	28	0	
07...	1400	1.6	6.4	20	30	5.9	2.8	6.0	.8	29	0	
07...	1530	1.6	6.7	20	20	6.0	2.4	6.1	.8	29	0	
07...	1730	1.7	6.7	10	40	7.3	2.0	6.1	.9	29	0	
07...	1900	1.5	6.7	20	20	5.5	2.4	6.0	.9	29	0	
07...	2100	1.4	6.7	10	40	6.1	1.8	5.8	.6	29	0	
08...	0910	.74	6.8	10	10	6.0	2.2	5.9	.6	28	0	
FEB., 1975												
05...	1400	41	6.6	40	20	3.3	.4	4.6	.9	14	0	
05...	2150	42	6.7	30	20	3.0	.8	4.2	.6	14	0	
06...	0130	38	6.9	30	20	2.5	.8	4.3	.6	15	0	
06...	1410	37	6.8	40	10	2.9	.8	4.5	.6	19	0	
06...	2045	39	6.9	30	10	1.9	.8	4.4	.6	14	0	
06...	2000	26	7.1	30	20	1.8	.9	4.3	.6	16	0	
06...	2300	32	6.7	40	20	1.9	.8	4.3	.9	14	0	

of water samples--Continued

DATE HR- JATE 17) /L)	ALKALI- NITY AS CACO ₃ DATE	DIS- SOLVED SULFATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (Cl) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED NITRATE (N) (MG/L)	DIS- SOLVED NITRITE (N) (MG/L)	DIS- SOLVED PLUS NITRATE (N) (MG/L)	DIS- SOLVED AMMONIA NITRO- GEN (N) (MG/L)	DIS- SOLVED ORGANIC NITRO- GEN (N) (MG/L)	DIS- SOLVED KJEL. NITRO- GEN (N) (MG/L)	DIS- SOLVED VFD- PHOS- (P) (MG/L)
11482270 BOND CREEK NEAR ORICK--CONTINUED											
MAY 1 1974 09... 09... 09... 09... 09... 09... 09... 09... 09... 09... 09... 09...	11	2.4	5.0	.0	.00	.00	.00	--	--	.09	.03
11482300 ELAM CREEK NEAR ORICK--CONTINUED											
MAY 1 1974 09... 09... 09... 09... 09... 09... 09... 09... 09... 09... 09... 09...	11	2.5	6.3	.2	.01	.00	.01	--	--	.08	.03
11482310 MCARTHUR CREEK NEAR ORICK--CONTINUED											
MAY 1 1974 09... 09... 09... 09... 09... 09... 09... 09... 09... 09... 09... 09...	12	3.1	9.0	.1	.01	.00	.01	--	--	.13	.02
11482320 LOW-SLOPE SCHIST CREEK NEAR ORICK--CONTINUED											
MAY 1 1974 10... 10... 10... 10... 10... 10... 10... 10... 10... 10... 10... 10...	5	2.4	7.3	.3	.00	.00	.00	--	--	.12	.03
11482330 HAYES CREEK NEAR ORICK--CONTINUED											
JULY, 1974 27... 27... 27... 27... 27... 27... 27... 27... 27... 27... 27... 27...	34	7.8	11	--	.01	.00	.01	.01	.08	.09	.01
11482450 LOST MAN CREEK NEAR ORICK--CONTINUED											
JULY, 1974 19... 19... 19... 19... 19... 19... 19... 19... 19... 19... 19... 19...	31	4.0	3.8	--	.00	.01	.00	.08	.00	.04	.03
SEP.	32	4.1	3.2	--	.00	.00	.00	.02	.03	.05	.01
11... 11... 11... 11... 11... 11... 11... 11... 11... 11... 11... 11...	47	4.0	4.5	--	.33	.00	.33	.01	.13	.14	.00
15... 15... 15... 15... 15... 15... 15... 15... 15... 15... 15... 15...	48	3.5	5.3	--	.05	.00	.05	.00	.16	.16	.03
JUNE, 1975 02... 02... 02... 02... 02... 02... 02... 02... 02... 02... 02... 02...	21	3.7	3.6	--	.00	.00	.00	.01	.01	.02	.01
08... 08... 08... 08... 08... 08... 08... 08... 08... 08... 08... 08...	14	3.0	3.3	--	.00	.00	.00	.00	3.3	3.3	.00
11482460 LARRY DAMM CREEK NEAR ORICK--CONTINUED											
JULY, 1974 27... 27... 27... 27... 27... 27... 27... 27... 27... 27... 27... 27...	33	4.0	6.4	--	.01	.00	.01	.01	.18	.19	.01
11482468 LITTLE LOST MAN CREEK AT SITE NO. 2 NEAR ORICK--CONTINUED											
JULY, 1974 19... 19... 19... 19... 19... 19... 19... 19... 19... 19... 19... 19...	24	3.0	5.5	--	.00	.00	.00	.04	.00	.03	.04
22... 22... 22... 22... 22... 22... 22... 22... 22... 22... 22... 22...	23	3.0	5.0	--	.00	.00	.00	.03	.00	.00	.01
SEP.											
11... 11... 11... 11... 11... 11... 11... 11... 11... 11... 11... 11...	21	3.0	5.5	--	.00	.01	.01	.00	.28	.28	.01
15... 15... 15... 15... 15... 15... 15... 15... 15... 15... 15... 15...	25	3.3	5.5	--	.00	.00	.00	.01	.02	.03	.02
NOV.											
07... 07... 07... 07... 07... 07... 07... 07... 07... 07... 07... 07...	23	3.0	5.8	--	.07	.00	.03	.03	.00	.03	.04
07... 07... 07... 07... 07... 07... 07... 07... 07... 07... 07... 07...	23	2.8	5.7	--	.04	.00	.04	.01	.00	.01	.04
07... 07... 07... 07... 07... 07... 07... 07... 07... 07... 07... 07...	23	2.9	5.8	--	.04	.00	.04	.03	.01	.04	.04
07... 07... 07... 07... 07... 07... 07... 07... 07... 07... 07... 07...	23	3.0	6.4	--	.08	.00	.08	.01	.09	.10	.05
07... 07... 07... 07... 07... 07... 07... 07... 07... 07... 07... 07...	23	5.2	5.0	--	.10	.00	.10	.01	.11	.12	.05
07... 07... 07... 07... 07... 07... 07... 07... 07... 07... 07... 07...	22	3.3	6.6	--	.13	.00	.13	.02	.12	.14	.05
07... 07... 07... 07... 07... 07... 07... 07... 07... 07... 07... 07...	22	2.8	6.4	--	.13	.02	.15	.03	.30	.33	.02
07... 07... 07... 07... 07... 07... 07... 07... 07... 07... 07... 07...	23	3.6	6.5	--	.12	.00	.12	.01	.23	.24	.02
07... 07... 07... 07... 07... 07... 07... 07... 07... 07... 07... 07...	24	3.3	6.3	--	.10	.00	.10	.01	.20	.21	.02
07... 07... 07... 07... 07... 07... 07... 07... 07... 07... 07... 07...	24	5.6	4.8	--	.14	.00	.14	.01	.22	.23	.02
07... 07... 07... 07... 07... 07... 07... 07... 07... 07... 07... 07...	24	3.2	6.4	--	.38	.00	.38	.03	.18	.21	.02
07... 07... 07... 07... 07... 07... 07... 07... 07... 07... 07... 07...	24	3.2	6.0	--	.05	.00	.05	.01	.23	.24	.02
07... 07... 07... 07... 07... 07... 07... 07... 07... 07... 07... 07...	24	1.9	5.9	--	.03	.05	.08	.01	.03	.04	.02
04... 04... 04... 04... 04... 04... 04... 04... 04... 04... 04... 04...	23	3.1	6.1	--	.04	.00	.04	.02	.20	.22	.02
FEB., 1975 06... 06... 06... 06... 06... 06... 06... 06... 06... 06... 06... 06...	9	1.7	5.3	--	.00	.00	.00	.14	.14	.01	
06... 06... 06... 06... 06... 06... 06... 06... 06... 06... 06... 06...	11	1.1	5.1	--	.01	.00	.01	.00	.04	.04	.00
06... 06... 06... 06... 06... 06... 06... 06... 06... 06... 06... 06...	12	1.2	6.0	--	.01	.00	.01	.01	.13	.14	.00
06... 06... 06... 06... 06... 06... 06... 06... 06... 06... 06... 06...	12	1.4	6.0	--	.00	.00	.00	.00	.46	.46	.00
06... 06... 06... 06... 06... 06... 06... 06... 06... 06... 06... 06...	11	1.5	5.9	--	.02	.00	.02	.01	1.2	1.2	.01
06... 06... 06... 06... 06... 06... 06... 06... 06... 06... 06... 06...	12	1.2	7.0	--	.00	.00	.01	.01	.10	.11	.02
06... 06... 06... 06... 06... 06... 06... 06... 06... 06... 06... 06...	11	1.3	6.7	--	.01	.00	.01	.00	.16	.16	.00

TABLE 14.--Chemical analyses

	DIS- SOLVED ORTHO. PHOS- PHORUS (P)	DIS- SOLVED SOLID(S) (SUM OF CONSTITUENTS)	DIS- SOLVED SOLID(S) (TONS PER AC-FT)	DIS- SOLVED SOLID(S) (TONS PER DAY)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SODIUM PERCENT SODIUM (MG/L)	SODIUM AD- SORP- TION RATIO	SPECIFIC CON- DUCT- ANCE (MICRO- MHO)	PH (UNITS)
DATE	(MG/L)	(MG/L)								
11482270 BOND CREEK NEAR ORICK--CONTINUED										
MAY , 1974 08...	.02	29	.04	.26	11	0	44	.5	43	7.2
		11482300 ELAM CREEK NEAR ORICK--CONTINUED						70 % LOGGED		
MAY , 1974 09...	.02	31	.04	.33	12	1	45	.6	47	6.9
		11482310 MCARTHUR CREEK NEAR ORICK--CONTINUED						75 % LOGGED		
MAY , 1974 09...	.02	36	.05	.65	11	1	54	.9	58	7.1
		11482320 LOW-SLOPE SCHIST CREEK NEAR ORICK--CONTINUED						60 % LOGGED		
MAY , 1974 10...	.01	29	.04	.03	8	1	57	.8	44	6.6
		11482330 HAYES CREEK NEAR ORICK--CONTINUED						40 % LOGGED		
JULY , 1974 27...	--	67	.09	.01	35	2	30	.5	115	7.1
		11482450 LOST MAN CREEK NEAR ORICK--CONTINUED						87 % LOGGED		
JULY , 1974 19...	--	49	.07	.11	28	0	22	.3	72	6.9
22...	--	50	.07	.08	29	0	26	.4	84	7.3
SEP.										
11...	--	69	.09	.04	49	2	17	.3	89	6.9
15...	--	70	.10	.04	45	0	24	.4	132	7.1
JUNE , 1975 02...	.01	38	.05	.37	20	0	30	.4	58	6.9
08...	.01	36	.05	.24	20	2	30	.4	61	6.9
		11482460 LARRY DAMM CREEK NEAR ORICK--CONTINUED						70 % LOGGED		
JULY , 1974 27...	--	60	.08	.09	28	0	32	.5	90	7.1
		11482468 LITTLE LOST MAN CREEK AT SITE NO. 2 NEAR ORICK--CONTINUED						60 % LOGGED		
JULY , 1974 19...	--	43	.06	.05	20	0	34	.5	--	--
22...	--	42	.06	.05	19	0	38	.6	65	7.5
SEP.										
11...	--	46	.06	.02	24	0	34	.5	78	7.6
15...	--	48	.07	.03	28	3	31	.5	83	7.7
OCT.										
07...	--	44	.06	.03	25	2	32	.5	75	--
07...	--	44	.06	.05	24	1	33	.5	75	--
07...	--	44	.06	.07	25	2	31	.5	78	--
07...	--	44	.06	.09	22	0	36	.5	79	--
07...	--	46	.06	.11	25	2	33	.5	79	--
07...	--	46	.06	.15	25	3	34	.5	79	R.1
07...	--	47	.06	.18	28	5	32	.5	79	7.1
07...	--	47	.06	.19	24	1	34	.5	79	7.4
07...	--	46	.06	.20	26	2	32	.5	80	7.4
07...	--	47	.06	.20	25	1	34	.5	79	--
07...	--	49	.07	.22	26	3	32	.5	78	7.5
07...	--	45	.06	.19	24	0	35	.5	77	7.8
07...	--	46	.06	.17	23	0	35	.5	78	7.6
03...	--	45	.06	.09	24	1	34	.5	76	--
DEC., 1975 05...	--	29	.04	3.21	19	0	48	.6	45	6.6
05...	--	29	.04	3.20	11	0	44	.6	45	7.1
06...	--	30	.04	3.08	10	0	48	.6	45	7.0
06...	--	32	.04	3.20	11	0	46	.6	45	7.7
06...	--	31	.04	3.26	13	2	41	.5	46	7.1
08...	--	31	.04	2.32	13	0	40	.5	45	7.1
08...	--	32	.04	2.76	11	2	40	.5	45	7.1

yses

of water samples--Continued

PH WITSI	DATE	CHEM- ICAL OXYGEN DEMAND	CHEM- ICAL OXYGEN DEMAND	SOL- VED DISSOLVED CARBON (CO ₂)	SUS- PENDED CARBON (C)	DIS- OLVED CARBON (C)	DIS- OLVED MILUM (CD)	DIS- OLVED COPPER (CU)	DIS- OLVED LEAD (PB)	DIS- OLVED ZINC (ZN)
		TEMPER- ATURE (DEG C)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)
11482270 BOND CREEK NEAR ORICK--CONTINUED										
7.2	MAY 1974 08... 11.5	--	--	1.4	3.4	--	--	--	--	--
11482300 ELAM CREEK NEAR ORICK--CONTINUED										
6.9	MAY 1974 09... 11.0	--	--	2.6	2.4	--	--	--	--	--
11482310 MCARTHUR CREEK NEAR ORICK--CONTINUED										
7.1	MAY 1974 09... 11.0	--	--	1.5	4.5	--	0	2	--	20
11482320 LOW-SLOPE SCHIST CREEK NEAR ORICK--CONTINUED										
6.6	MAY 1974 10... 9.0	--	--	3.2	2.0	.3	--	--	--	--
11482330 HAYES CREEK NEAR ORICK--CONTINUED										
7.1	JULY, 1974 27... 15.0	2	--	5.2	--	--	0	3	--	0
11482450 LOST MAN CREEK NEAR ORICK--CONTINUED										
6.9 7.3 S.F.P.	JULY, 1974 19... 14.5 22... 14.5 SEP.	3	--	7.7	2.3	.1	0	1	--	0
6.9 7.1 JUNE, 1975	11... 14.5 15... 14.0 02... 12.0 08... 12.0	--	--	11	--	--	0	1	--	10
11482460 LARRY DAMM CREEK NEAR ORICK--CONTINUED										
7.1	JULY, 1974 27... 16.0	6	--	5.0	--	.2	1	11	--	0
11482468 LITTLE LOST MAN CREEK AT SITE NO. 2 NEAR ORICK--CONTINUED										
7.5 7.6 7.7 -- -- -- R.1 7.1 7.4 7.4 -- 7.5 7.8 7.6 -- 6.6	JULY, 1974 19... 14.5 22... 15.0 S.F.P. 11... 15.0 15... 14.5 NOV. 01... -- 07... -- 07... -- 07... 9.5 07... -- 07... 9.5 07... 9.5 FEB., 1975 05... 7.5 05... 8.0 05... 8.0 06... 8.0 06... 9.0 06... 9.5 06... 9.5 06... 9.5 08... --	1	--	--	1.7	.1	0	0	--	0
11482468 LITTLE LOST MAN CREEK AT SITE NO. 2 NEAR ORICK--CONTINUED										
7.5 7.6 7.7 -- -- -- R.1 7.1 7.4 7.4 -- 7.5 7.8 7.6 -- 6.6	2	--	1.4	1.3	.1	1	4	--	--	0
11482468 LITTLE LOST MAN CREEK AT SITE NO. 2 NEAR ORICK--CONTINUED										
7.5 7.6 7.7 -- -- -- R.1 7.1 7.4 7.4 -- 7.5 7.8 7.6 -- 6.6	11	--	7.4	.3	1	1	0	--	--	0
11482468 LITTLE LOST MAN CREEK AT SITE NO. 2 NEAR ORICK--CONTINUED										
7.5 7.6 7.7 -- -- -- R.1 7.1 7.4 7.4 -- 7.5 7.8 7.6 -- 6.6	17	--	7.0	.3	1	1	1	--	--	0
11482468 LITTLE LOST MAN CREEK AT SITE NO. 2 NEAR ORICK--CONTINUED										
7.5 7.6 7.7 -- -- -- R.1 7.1 7.4 7.4 -- 7.5 7.8 7.6 -- 6.6	16	--	6.3	.1	1	1	1	--	--	0
11482468 LITTLE LOST MAN CREEK AT SITE NO. 2 NEAR ORICK--CONTINUED										
7.5 7.6 7.7 -- -- -- R.1 7.1 7.4 7.4 -- 7.5 7.8 7.6 -- 6.6	17	--	6.6	--	1	1	3	--	--	0
11482468 LITTLE LOST MAN CREEK AT SITE NO. 2 NEAR ORICK--CONTINUED										
7.5 7.6 7.7 -- -- -- R.1 7.1 7.4 7.4 -- 7.5 7.8 7.6 -- 6.6	9	3.4	7.9	.4	1	1	2	--	--	0
11482468 LITTLE LOST MAN CREEK AT SITE NO. 2 NEAR ORICK--CONTINUED										
7.5 7.6 7.7 -- -- -- R.1 7.1 7.4 7.4 -- 7.5 7.8 7.6 -- 6.6	11	1.8	6.0	.4	1	1	1	--	--	0
11482468 LITTLE LOST MAN CREEK AT SITE NO. 2 NEAR ORICK--CONTINUED										
7.5 7.6 7.7 -- -- -- R.1 7.1 7.4 7.4 -- 7.5 7.8 7.6 -- 6.6	6	1.8	7.5	.2	1	1	1	--	--	0
11482468 LITTLE LOST MAN CREEK AT SITE NO. 2 NEAR ORICK--CONTINUED										
7.5 7.6 7.7 -- -- -- R.1 7.1 7.4 7.4 -- 7.5 7.8 7.6 -- 6.6	2	--	5.0	.2	1	1	1	--	--	0
11482468 LITTLE LOST MAN CREEK AT SITE NO. 2 NEAR ORICK--CONTINUED										
7.5 7.6 7.7 -- -- -- R.1 7.1 7.4 7.4 -- 7.5 7.8 7.6 -- 6.6	6	1.5	4.1	.3	1	1	1	--	--	0
11482468 LITTLE LOST MAN CREEK AT SITE NO. 2 NEAR ORICK--CONTINUED										
7.5 7.6 7.7 -- -- -- R.1 7.1 7.4 7.4 -- 7.5 7.8 7.6 -- 6.6	27	1.2	10	.3	1	1	1	--	--	0
11482468 LITTLE LOST MAN CREEK AT SITE NO. 2 NEAR ORICK--CONTINUED										
7.5 7.6 7.7 -- -- -- R.1 7.1 7.4 7.4 -- 7.5 7.8 7.6 -- 6.6	0	--	11	.2	0	1	1	--	--	0
11482468 LITTLE LOST MAN CREEK AT SITE NO. 2 NEAR ORICK--CONTINUED										
7.5 7.6 7.7 -- -- -- R.1 7.1 7.4 7.4 -- 7.5 7.8 7.6 -- 6.6	8	1.8	3.8	.4	1	1	0	--	--	0
11482468 LITTLE LOST MAN CREEK AT SITE NO. 2 NEAR ORICK--CONTINUED										

TABLE 14.--Chemical analyses

DATE	TIME	INSTAN-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	CAR-	
		TANEOUS	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	PO-	BONATE	
		(SILO2)	(MG/L)	(AL)	(FE)	(Mg/L)	(CA)	(Mg/L)	(NA)	(K)	(CO3)
11482468 LITTLE LOST MAN CREEK AT SITE NO. 2 NEAR ORICK--CONTINUED											
FEB., 1975											
09...	0110	37	6.7	40	30	2.6	.9	4.5	.9	17	--
09...	0200	38	6.6	40	30	3.3	.7	4.1	.6	19	--
09...	0300	37	6.7	80	40	2.5	.9	4.7	.6	19	--
09...	0500	36	6.8	20	70	3.0	.9	4.4	.5	16	--
09...	0700	36	6.8	30	50	3.0	.9	4.1	.5	13	--
09...	0910	35	6.7	50	30	3.0	.9	4.2	.6	15	--
09...	1215	30	6.8	30	10	3.3	.9	4.1	.5	17	--
JUNE											
02...	1415	2.7	7.0	30	30	3.8	.9	5.0	.4	22	0
04...	1400	2.1	7.0	10	10	3.8	1.3	4.8	.5	19	0
JULY											
31...	1200	.53	7.9	--	--	5.0	.9	5.8	.6	--	--
11482480 BERRY GLEN CREEK NEAR ORICK											
APR., 1974											
25...	1245	.34	7.7	60	530	6.4	2.3	6.4	.8	32	0
11482500 REDWOOD CREEK AT ORICK											
JULY, 1974											
19...	1200	63	7.7	20	100	24	2.2	3.9	.8	74	0
24...	1400	51	7.2	10	90	23	2.8	5.0	.8	75	0
SEP.											
11...	1200	17	8.3	0	120	21	2.7	5.5	1.0	71	0
17...	1645	13	8.9	10	370	20	2.8	5.7	.8	68	0
JUNE, 1975											
02...	1630	345	5.8	60	70	19	1.9	3.5	.6	59	0
08...	1730	222	6.0	40	60	20	2.5	3.8	.7	63	0
DATE	TIME	DEPTH	DIS- SOLVED (SILO2) (MG/L)	DIS- SOLVED SILICA (AL) (Mg/L)	DIS- SOLVED IRON (FE) (Mg/L)	DIS- SOLVED CALCIUM (CA) (Mg/L)	DIS- SOLVED MAGNESIUM (Mg) (Mg/L)	DIS- SOLVED SODIUM (NA) (Mg/L)	DIS- SOLVED TAS- STUM (K) (Mg/L)	DIS- SOLVED HICAR- BONATE (HCO3) (MG/L)	
411734124051302 REDWOOD CREEK ESTUARY SITE 1B NEAR ORICK											
JULY, 1974											
25...	1800	.5	7.4	40	54	78	630	29	88		
SEP.											
20...	1615	1.0	7.9	60	36	18	120	6.2	83		
MAY, 1975											
26...	0645	.0	5.8	80	17	1.8	3.6	.7	54		
411734124051802 REDWOOD CREEK ESTUARY SITE 2B NEAR ORICK											
JULY, 1974											
25...	1845	1.0	7.1	30	78	170	1300	62	93		
SEP.											
20...	1615	1.0	7.4	60	38	18	110	6.1	84		
MAY, 1975											
26...	0755	.0	5.8	60	17	2.7	8.1	1.0	58		
411732124051802 REDWOOD CREEK ESTUARY SITE 3B NEAR ORICK											
SEP., 1974											
20...	1620	1.0	7.7	50	35	20	130	7.0	84		
MAY, 1975											
26...	0830	.0	5.7	80	17	3.5	19	1.3	54		

of water samples--Continued

R- ATE 31 /L)	DATE	ALKALINITY AS CACO ₃	DIS-SOLVED SULFATE (SO ₄)	DIS-SOLVED CHLO- RIDE (CL)	DIS-SOLVED FLUO- RIDE (F)	DIS-SOLVED NITRATE (NO ₃)	DIS-SOLVED NITRITE (NO ₂)	DIS-SOLVED PLUS	DIS-SOLVED AMMONIA (NH ₃)	DIS-SOLVED ORGANIC GEN	DIS-SOLVED KJFL.	DIS-SOLVED NITRO-GEN (N)	DIS-SOLVED PHOS-PHORUS (P)
		(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)
11482468 LITTLE LOST MAN CREEK AT SITE NO. 2 NEAR ORICK--CONTINUED													
FEB. 1975													
09...	14	1.3	6.3	--	.08	.00	.08	.00	.16	.16	.00		
09...	12	1.2	6.1	--	.00	.00	.00	.00	.08	.08	.00		
09...	16	1.3	5.7	--	.08	.00	.08	.00	.15	.15	.00		
09...	13	1.6	6.1	--	.00	.00	.00	.03	.04	.07	.03		
09...	10	1.4	5.5	--	.04	.00	.05	.00	.07	.07	.02		
09...	12	1.3	5.2	--	.02	.00	.02	.00	.04	.04	.02		
09...	10	1.2	4.7	--	.14	.00	.15	.01	.63	.64	.02		
JUNE													
07...	18	2.9	5.8	--	.00	.00	.00	.01	.07	.08	.02		
08...	18	1.7	5.5	--	.00	.00	.00	.02	3.0	3.0	.01		
JULY													
31...	--	2.3	6.9	--	--	--	--	--	--	.12	.01		
11482480 BERRY GLEN CREEK NEAR ORICK--CONTINUED													
APR. 1974													
25...	28	5.3	6.5	.0	.03	.00	.03	--	--	.26	.01		
11482500 REDWOOD CREEK AT ORICK--CONTINUED													
JULY, 1974													
19...	65	15	5.8	--	.03	.00	.03	.04	.03	.07	.07		
24...	51	13	5.1	--	.03	.00	.03	.00	.00	.00	.00		
SEP.													
11...	58	9.3	5.9	--	.00	.00	.00	.00	.24	.24	.00		
17...	56	8.6	6.7	--	.01	.00	.01	.01	.13	.14	.03		
JUNE, 1975													
07...	48	11	3.3	--	.00	.00	.00	.01	.04	.05	.02		
08...	52	11	3.6	--	.00	.00	.00	.00	3.3	3.3	.01		
411734124051302 REDWOOD CREEK ESTUARY SITE 1B NEAR ORICK--CONTINUED													
JULY, 1974													
25...	91	150	1200		2190	2.98	460	380	74	13			
SEP.													
20...	68	38	240		281	.39	160	96	58	3.7			
MAY, 1975													
25...	44	9.6	3.6		69	.09	50	6	13	.2			
411734124051802 REDWOOD CREEK ESTUARY SITE 2B NEAR ORICK--CONTINUED													
JULY, 1974													
25...	75	320	2500		4480	6.07	190	H20	74	19			
SEP.													
20...	69	41	230		536	.73	250	190	50	3.3			
MAY, 1975													
25...	48	11	12		86	.12	52	4	25	.5			
411732124051802 REDWOOD CREEK ESTUARY SITE 3B NEAR ORICK--CONTINUED													
SEP., 1974													
20...	69	43	250		534	.73	170	100	61	4.3			
MAY, 1975													
25...	43	14	29		116	.16	57	13	41	1.1			
ALKALINITY AS CACO ₃	DIS-SOLVED SULFATE (SO ₄)	DIS-SOLVED CHLO- RIDE (CL)	DIS-SOLVED SOLIDS (SUM OF SOLIDS CONSTITUENTS)	DIS-SOLVED SOLIDS (TONS PER AC-FT)	HARDNESS (CA-MG)	HARDNESS (MGS)	NON-CAP-NESSES (MG/L)	PERCENT SODIUM	SODIUM ADSORPTION RATIO				

TABLE 14.--Chemical analyses

DIS-	DIS-	DIS-	DIS-	NON-	SODIUM	SPE-
SOLVED	SOLVED	SOLVED	SOLVED	CAR-	AD-	CIFIC
ORTHO.	SOLIDS	SOLVED	SOLVED	RONATE	CON-	CON-
PHOS-	(SUM OF	SOLIDS	SOLIDS	HARD-	SODIUM	DUCTI-
PHORUS	CONSTI-	(TONS	(TONS	NFSS	PERCENT	ANCE
(P)	TENTS)	PER	PER	(CA+Mg)	SODIUM	(MICRO-
DATE	(MG/L)	AC-FE)	DAY)	(MG/L)	(MG/L)	MHOS)
					RATIO	(UNITS)
11482468 LITTLE LOST MAN CREEK AT SITE NO. 2 NEAR ORICK--CONTINUED						
APR., 1975						
09...	--	32	.04	3.20	10	0
09...	--	32	.04	3.20	11	0
09...	--	32	.04	3.20	10	0
09...	--	31	.04	3.01	11	0
09...	--	29	.04	2.82	11	1
09...	--	29	.04	2.74	11	0
09...	--	31	.04	2.51	12	0
JUNE						
02...	.01	37	.05	.27	13	0
08...	.01	34	.05	.19	15	0
JULY						
31...	--	--	--	--	16	--
					43	.6
11482480 BERRY GLEN CREEK NEAR ORICK--CONTINUED						
APR., 1974						
25...	.01	52	.07	.05	25	0
11482500 REDWOOD CREEK AT ORICK--CONTINUED						
60% LOGGED						
JULY , 1974						
19...	--	96	.13	16.3	69	8
24...	--	94	.13	12.9	69	7
SEP.						
11...	--	89	.12	4.09	64	5
17...	--	87	.12	3.05	61	6
JUNE, 1975						
02...	.01	74	.10	68.9	55	7
08...	.01	79	.11	47.4	60	9
					12	.2
					12	.2
					127	7.7
					136	7.6
SPF-				CHEM-	CHEM-	DIS-
CIFIC				ICAL	ICAL	SOL-
CON-				OXYGEN	OXYGEN	VFD
DUCTI-				Demand	Demand	PENDFO
ANCE				(LOW	(HIGH	CARBON
(MICRO-	PH	TEMPER-	ATURE	(FVF/L)	(FVF/L)	ORGANIC
MHOS)	(UNITS)	(DEG C)		(MG/L)	(CO ₂)	CARBON
DATE				(MG/L)	(MG/L)	(C)
				(MG/L)	(MG/L)	(C)
411734124051302 REDWOOD CREEK ESTUARY SITE 1B NEAR ORICK--CONTINUED						
JULY, 1974						
25...	3630	7.5	29.0	22	--	4.5
SEP.						--
20...	916	7.4	16.0	8	--	5.3
MAY , 1975						--
26...	116	7.4	17.0	--	1	3.4
					2.8	.1
411734124051802 REDWOOD CREEK ESTUARY SITE 2B NEAR ORICK--CONTINUED						
JULY, 1974						
25...	8150	7.5	29.5	67	--	4.6
SEP.						--
20...	968	7.4	16.0	8	--	5.4
MAY , 1975						.3
26...	147	7.2	15.5	--	4	5.9
					4.7	.1
411732124051802 REDWOOD CREEK ESTUARY SITE 3B NEAR ORICK--CONTINUED						
SEP., 1974						
20...	1050	7.6	16.0	12	--	3.4
MAY , 1975						.3
26...	212	7.8	17.0	--	2	1.4
					4.8	.1

of water samples--Continued

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PH	DATE	CHEM- ICAL OXYGEN DEMAND TEMPER- ATURE (DEG C)	CHEM- ICAL OXYGEN DEMAND (LOW (HIGH LEVEL)	SOL- VED CARBON DIOXIDE (CO ₂) (MG/L)	SUS- PENDED CARBON (C) (MG/L)	DIS- ORGANIC CARBON (C) (MG/L)	DIS- CAD- MIUM (Cu) (UG/L)	DIS- SOLVED COPPER (Cu) (UG/L)	DIS- SOLVED LEAD (Pb) (UG/L)	DIS- SOLVED ZINC (Zn) (UG/L)
		(DEG C)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)
11482468 LITTLE LOST MAN CREEK AT SITE NO. 2 NEAR ORICK--CONTINUED										
	FFB, 1975									
7.1	09...	9.0	--	8	2.2	4.1	.2	1	1	2
7.1	09...	9.0	--	7	2.4	3.9	.2	1	1	2
7.1	09...	9.0	--	9	2.4	4.1	.2	1	1	3
7.1	09...	9.0	--	10	1.6	3.7	.2	1	1	7
7.2	09...	8.5	--	9	1.3	4.8	.1	1	3	2
7.2	09...	9.0	--	8	1.5	3.0	.2	1	1	2
7.2	09...	9.0	--	9	1.7	2.6	.1	0	1	20
7.2	JUNE									
7.4	02...	11.5	--	4	1.4	1.8	.1	0	0	4
7.4	08...	13.5	--	4	1.9	2.0	.0	0	0	0
7.2	JULY									
7.1	31...	14.0	--	--	--	--	--	--	--	--
11482480 BERRY GLEN CREEK NEAR ORICK--CONTINUED										
	APR, 1974									
7.0	25...	10.5	--	--	5.1	7.0	1.0	0	3	--
11482500 REDWOOD CREEK AT ORICK--CONTINUED										
	JULY, 1974									
7.4	19...	19.0	14	--	4.7	1.8	.2	1	4	--
7.5	24...	22.0	6	--	3.8	1.6	.2	0	2	--
7.6	SFP.									
6.4	11...	19.0	--	--	2.9	1.7	.1	0	0	--
7.6	17...	17.0	12	--	43	1.2	.1	1	1	--
6.4	JUNE, 1975									
7.7	02...	16.5	--	5	1.9	.1	.0	0	0	4
7.6	08...	21.0	--	3	2.5	1.7	.1	0	1	3

TABLE 14.--Chemical analyses

DATE	TIME	INSTAN-	DIS-								
		TANFOUS	SOLVED	SOLVED	SOLVED	SOLVED	MAG-	SOLVED	Po-	SOLVED	RICAR-
			DIS-	SILICA	ALUM-	IRON	CAL-	NFE-	SODIUM	TAS-	BONATE
			(STO2)	(AL)	(FF)	(CA)	(MG)	(NA)	(K)	(HC03)	(C03)
			(MG/L)	(UG/L)	(UG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)
11532600 WEST BRANCH MILL CREEK NEAR CRESCENT CITY											
MAR., 1975											
18...	1530	--	5.1	40	30	2.9	1.0	2.3	.8	13	--
11532602 WEST BRANCH MILL CREEK BELOW RED ALDER CAMPGROUND, NEAR CRESCENT CITY											
AUG., 1974											
01...	1200	1.3	8.8	0	40	6.0	.9	3.9	.6	23	0
SEP.											
12...	1415	.54	8.7	20	20	5.0	2.5	4.7	1.0	25	0
23...	1445	.45	8.5	10	20	5.5	.1	4.4	.3	23	0
JAN., 1975											
07...	1110	154	7.3	40	30	3.5	1.2	3.5	.5	14	--
07...	1900	680	5.6	30	20	3.9	.9	2.7	.6	12	--
08...	0900	375	6.7	20	40	3.2	1.0	3.2	.3	10	--
MAR.											
17...	1930	--	5.3	40	50	3.1	.8	2.6	.6	11	--
JUNE											
05...	1530	6.3	7.3	10	10	3.8	1.5	3.5	.4	16	0
11532605 WEST BRANCH MILL CREEK AT BRIDGE, NEAR CRESCENT CITY											
JAN., 1975											
07...	1530	508	6.4	60	40	5.7	1.0	3.1	.6	16	--
07...	2100	876	5.9	90	60	3.3	1.0	2.9	.6	12	--
08...	1155	486	7.0	50	60	2.5	1.2	3.2	.6	10	--
MAR.											
17...	1530	446	6.8	120	--	3.6	.9	3.0	.5	12	--
18...	1600	1710	5.7	30	30	2.0	.8	2.6	.7	8	--
19...	1000	631	6.8	10	40	2.9	1.3	2.8	.7	11	--
11532610 EAST FORK MILL CREEK NEAR CRESCENT CITY											
AUG., 1974											
01...	1200	4.2	8.5	20	40	5.0	2.4	4.1	.5	30	0
SEP.											
12...	1300	1.9	7.2	10	50	6.5	2.3	4.2	.9	31	0
23...	1300	1.8	7.1	0	20	6.2	2.7	4.5	.6	30	0
JUNE, 1975											
05...	1315	17	8.9	20	20	4.0	2.5	3.3	.5	21	0
11532615 EAST FORK MILL CREEK AT BRIDGE, NEAR CRESCENT CITY											
JAN., 1975											
07...	1750	1070	7.5	50	50	3.7	2.4	2.5	.5	17	--
07...	2315	1030	7.8	110	80	4.2	1.4	2.8	.4	16	--
08...	1330	640	8.1	30	80	3.9	1.3	2.8	.8	17	--
MAR.											
17...	1630	935	6.8	40	40	1.9	2.2	3.4	.6	19	--
18...	1530	3130	5.9	30	10	1.7	1.1	2.0	.7	13	--
19...	0900	910	6.8	10	60	2.2	1.6	2.4	.6	15	--
11532620 MILL CREEK NEAR CRESCENT CITY											
FEB., 1974											
G15...	1515	78	8.2	370	470	3.9	1.7	3.2	.5	19	0
G16...	1615	890	7.7	40	50	3.7	1.3	2.9	.4	16	0
MAR.											
G24...	1200	45	8.6	20	60	3.6	1.4	3.5	.4	18	0
G24...	1000	153	8.5	30	80	3.9	1.6	4.3	.6	19	0
AUG.											
01...	1200	7.2	7.6	10	50	6.3	2.2	4.0	.5	30	0
SEP.											
12...	1200	3.5	6.3	0	60	6.3	3.0	4.4	1.3	32	0
23...	1100	1.7	6.0	10	50	6.5	1.0	4.5	.4	31	0
JAN., 1975											
07...	1500	1020	7.3	40	60	6.3	.5	3.1	.6	16	--
07...	2825	1480	6.8	40	40	3.4	1.5	2.9	.6	13	--
08...	0900	1240	7.7	20	20	3.0	1.3	3.0	.6	14	--
MAR.											
17...	1545	1410	6.3	30	50	2.7	1.7	2.6	.3	16	--
18...	1600	4250	6.6	200	100	1.7	1.2	2.4	1.3	12	--
19...	1100	1420	6.9	40	60	2.7	.6	3.2	.6	14	--
SEP.											
07...	1115	28	8.3	10	70	4.2	2.0	3.8	.4	21	0

of water samples--Continued

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CAR-
INATE
(P)
IC/L)

	ALKALI- LITINITY	DIS- AS	DIS- SULFATE	DIS- CHLOR- (SO4)	DIS- FLUO- (Cl)	DIS- NITRATE	DIS- NITRITE	DIS- SOLVED PLUS	DIS- SOLVED AMMONIA	DIS- SOLVED ORGANIC	DIS- SOLVED KJEL.	DIS- SOLVED VFA-
DATE	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)
11532600 WEST BRANCH MILL CREEK NEAR CRESCENT CITY--CONTINUED												
MAR., 1975												
18...	6	1.8	2.4	.2	.42	.00	.42	--	--	.19	.00	
--												
11532602 WEST BRANCH MILL CREEK BELOW RED ALDER CAMPGROUND, NEAR CRESCENT CITY--CONTINUED												
AUG., 1974												
01...	19	2.3	--	--	.67	.00	.67	.13	.47	.60	.00	
SEP.												
02...	21	2.1	--	--	.17	.00	.17	.01	.10	.11	--	
03...	18	2.3	--	--	.17	.01	.13	.01	.04	.05	.01	
JAN., 1975												
07...	11	1.3	4.1	.0	.37	.00	.37	--	--	.39	.00	
07...	10	1.2	4.2	.0	.75	.00	.75	--	--	.88	.00	
08...	8	.9	4.7	.0	.28	.00	.28	--	--	.22	.00	
MAR.												
17...	9	1.5	2.3	.1	.13	.00	.13	--	--	.05	.04	
JUNE												
05...	13	1.3	3.3	--	.03	.00	.03	.01	2.6	2.6	.01	
0												
11532605 WEST BRANCH MILL CREEK AT BRIDGE, NEAR CRESCENT CITY--CONTINUED												
JAN., 1975												
07...	10	1.5	5.0	.0	.89	.00	.89	--	--	.54	.00	
07...	10	1.4	4.3	.0	.54	.00	.54	--	--	.31	.01	
08...	11	1.3	5.1	.0	.43	.00	.43	--	--	.26	.01	
MAR.												
17...	13	2.0	3.5	.0	.03	.00	.03	--	--	--	.02	
18...	9	1.9	4.0	.1	.35	.03	.38	--	--	.21	.01	
19...	11	1.3	3.0	.1	.35	.00	.35	--	--	.02	.03	
--												
11532610 EAST FORK MILL CREEK NEAR CRESCENT CITY--CONTINUED												
AUG., 1974												
01...	22	3.5	4.4	--	.14	.00	.14	.00	.08	.08	.01	
SEP.												
02...	25	3.4	4.5	--	.00	.00	.00	.01	.17	.18	.00	
03...	25	5.0	5.7	--	.00	.01	.00	.01	.15	.16	.02	
JUN., 1975												
05...	17	1.7	2.7	--	.00	.00	.00	.00	2.5	2.5	.01	
0												
11532615 EAST FORK MILL CREEK AT BRIDGE, NEAR CRESCENT CITY--CONTINUED												
JAN., 1975												
07...	14	1.7	3.5	.0	.19	.00	.19	--	--	.50	.01	
07...	13	1.3	4.1	.0	.93	.00	.93	--	--	.47	.00	
08...	15	1.5	4.3	.0	.22	.00	.22	--	--	.39	.01	
MAR.												
17...	15	1.4	1.8	.0	.07	.00	.07	--	--	.15	.02	
18...	12	2.4	2.7	.0	.20	.00	.20	--	--	.03	.02	
19...	13	1.4	2.8	.1	.05	.00	.05	--	--	.17	.00	
--												
11532620 MILL CREEK NEAR CRESCENT CITY--CONTINUED												
FFH., 1974												
G15...	16	2.4	4.1	.0	.25	.01	.26	--	--	.22	.04	
G10...	13	2.0	3.6	.0	.23	.00	.23	--	--	.34	.01	
MAR.												
G21...	15	2.1	4.5	.2	.03	.00	.03	--	--	.21	.00	
G28...	16	3.4	5.1	.2	.03	.00	.03	--	--	.19	.00	
AUG.												
01...	23	3.0	4.3	--	.01	.00	.01	.00	.21	.21	.01	
SEP.												
02...	26	3.0	4.1	--	.00	.00	.00	.02	.24	.26	.00	
03...	25	3.5	4.8	--	.00	.00	.00	.01	.03	.04	.01	
JUN., 1975												
07...	12	1.6	4.4	.0	.33	.00	.33	--	--	.84	.00	
07...	11	1.6	4.0	.0	.26	.00	.26	--	--	.41	.00	
08...	11	1.3	4.2	.0	.35	.00	.35	--	--	.26	.00	
MAR.												
17...	13	1.5	2.3	.2	.16	.00	.16	--	--	.06	.03	
18...	10	1.4	2.3	.1	.24	.00	.26	--	--	.10	.02	
19...	12	1.9	3.4	.1	.25	.00	.25	--	--	.05	.02	
00...	17	1.5	3.5	--	.02	.00	.02	.01	2.8	2.8	.01	

TABLE 14.--Chemical analyses

DATE	SOLVED ORTHO. PHOS- PHOPUS (P) DATE	SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	SOLVED SOLIDS (TONS AC-FT)	SOLVED SOLIDS (TONS PER DAY)	HARD- NESS (CA+Mg) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	PERCENT SODIUM (MG/L)	SODIUM AD- SORP- TION RATIO	SPEC- IFIC COND- DUCT- ANCE (MICRO- Mhos)	PH (UNITS)
11532600 WEST BRANCH MILL CREEK NEAR CRESCENT CITY--CONTINUED										
MAR. 1975										
1A...	.04	25	.03	--	11	1	29	.3	26	6.1
11532602 WEST BRANCH MILL CREEK BELOW RED ALDER CAMPGROUND, NEAR CRESCENT CITY--CONTINUED										
AUG. 1974										
01...	--	42	.06	.15	19	0	30	.4	59	6.9
SFP.										
12...	--	40	.05	.06	23	2	30	.4	62	6.9
23...	--	37	.05	.04	14	0	40	.5	64	6.8
JAN. 1975										
07...	.01	30	.04	12.5	14	2	35	.4	39	--
07...	.01	28	.04	51.4	13	4	29	.3	38	--
08...	.02	26	.04	26.3	12	4	36	.4	39	--
MAR.										
17...	.03	23	.03	--	11	2	32	.3	30	--
JUNE										
05...	.01	29	.04	.49	16	3	32	.4	47	5.9
11532605 WEST BRANCH MILL CREEK AT BRIDGE, NEAR CRESCENT CITY--CONTINUED										
JAN. 1975										
07...	.00	35	.05	48.0	18	5	26	.3	42	6.5
07...	.00	28	.04	66.2	12	3	32	.4	38	7.0
08...	.01	28	.04	36.7	11	3	37	.4	39	6.7
MAR.										
17...	.01	27	.04	32.5	13	3	33	.4	40	6.3
18...	.02	24	.03	111	8	2	38	.4	33	6.6
19...	.02	26	.04	48.3	13	4	31	.3	44	6.4
11532610 EAST FORK MILL CREEK NEAR CRESCENT CITY--CONTINUED										
AUG. 1974										
01...	--	44	.06	.50	22	0	28	.4	64	7.4
SFP.										
12...	--	44	.06	.23	26	0	25	.4	66	7.0
23...	--	47	.06	.23	27	2	26	.4	70	7.3
JUNE 1975										
05...	.02	34	.05	1.60	20	3	26	.3	55	7.1
11532615 EAST FORK MILL CREEK AT BRIDGE, NEAR CRESCENT CITY--CONTINUED										
JAN. 1975										
07...	.01	31	.04	89.6	19	5	22	.2	42	6.5
07...	.01	34	.05	94.6	16	3	27	.3	43	--
08...	.01	32	.04	55.7	15	1	27	.3	42	6.9
MAR.										
17...	.02	28	.04	70.7	14	0	34	.4	42	6.4
18...	.02	24	.03	203	9	0	31	.3	41	6.8
19...	.01	26	.04	63.9	12	0	29	.3	42	6.5
11532620 MILL CREEK NEAR CRESCENT CITY--CONTINUED										
FEB. 1974										
G15...	.01	36	.05	7.58	17	1	29	.3	46	6.7
G19...	.00	31	.04	74.5	15	1	29	.3	40	6.9
MAR.										
G26...	.01	33	.04	84.6	15	0	33	.4	47	7.2
G28...	.00	37	.05	15.3	16	1	35	.5	50	7.2
AUG.										
01...	--	43	.06	.84	25	0	26	.3	63	7.1
SFP.										
12...	--	44	.06	.42	28	2	24	.4	88	7.5
23...	--	42	.06	.42	20	0	32	.4	74	7.4
JAN. 1975										
07...	.01	36	.05	93.6	18	5	37	.3	41	6.7
07...	.01	39	.05	198	16	5	28	.3	37	--
08...	.01	24	.04	97.1	13	1	32	.4	41	--
MAR.										
17...	.03	26	.06	44.0	14	1	28	.3	36	--
18...	.02	24	.03	75	9	0	31	.3	32	--
19...	.02	27	.04	104	10	0	38	.4	42	6.1
JUN.										
05...	.02	34	.05	2.77	19	2	30	.4	55	7.2

ses

of water samples--Continued

PH ITS)	DATE	CHEM- ICAL	CHEM- ICAL	DIS-		SUS- PENDED	DIS-		DIS-		DIS-
		OXYGEN DEMAND (LOW LEVEL)	OXYGEN DEMAND (HIGH LEVEL)	SOL- VED CARBON (CO ₂)	ORGANIC CARBON (C)	ORGANIC CARBON (MG/L)	CAD- MIUM (CDI)	SOLVED COPPER (CU)	SOLVED LEAD (Pb)	SOLVED ZINC (Zn)	
		TEMPER- ATURE (DEG C)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	
11532600 WEST BRANCH MILL CREEK NEAR CRESCENT CITY--CONTINUED											
6.1	MAR., 1975	18...	9.5	--	44	17	2.8	5.8	0	1	--
											60
11532602 WEST BRANCH MILL CREEK BELOW RED ALDER CAMPGROUND, NEAR CRESCENT CITY--CONTINUED											
6.9	AUG., 1974	01...	15.5	1	--	4.6	--	--	0	4	--
6.9	SEP.	12...	15.0	3	--	5.0	1.1	.4	1	0	--
6.8	23...	14.0	2	--	5.8	--	--	1	1	--	0
--	JAN., 1975	07...	9.0	--	?	--	5.2	--	0	1	--
--		07...	9.5	--	11	--	5.9	.5	0	3	--
--		08...	9.0	--	5	--	6.5	.2	1	13	--
5.9	MAR.	17...	--	--	13	--	3.0	.8	0	4	--
	JUNE	05...	15.0	--	2	32	2.6	.2	0	0	10
											0
11532605 WEST BRANCH MILL CREEK AT BRIDGE, NEAR CRESCENT CITY--CONTINUED											
6.5	JAN., 1975	07...	16.0	--	12	8.1	3.5	.4	0	1	--
7.0		07...	10.0	--	14	1.9	8.2	.7	0	2	--
6.7		08...	9.5	--	10	3.2	2.6	.2	0	3	--
6.3	MAR.	17...	9.0	--	21	9.6	3.3	.3	?	13	--
6.6		18...	9.5	--	39	3.2	2.1	1.2	1	0	--
6.4		19...	9.0	--	11	7.0	3.0	.2	1	0	40
11532610 EAST FORK MILL CREEK NEAR CRESCENT CITY--CONTINUED											
7.4	AUG., 1974	01...	18.0	15	--	1.9	1.1	.1	0	8	--
7.0	SEP.	12...	16.5	3	--	5.0	1.0	.0	0	1	--
7.3	23...	15.0	2	--	2.4	1.7	.2	0	1	--	0
7.1	JUNE, 1975	05...	15.5	--	1	2.7	8.9	.1	0	0	0
11532615 EAST FORK MILL CREEK AT BRIDGE, NEAR CRESCENT CITY--CONTINUED											
5.5	JAN., 1975	07...	10.0	--	14	8.6	4.0	--	0	3	--
5.9		07...	9.5	--	8	--	4.1	.5	1	3	--
5.4		08...	9.0	--	6	3.4	4.1	.2	1	7	--
5.8	MAR.	17...	9.0	--	18	12	5.3	.3	0	0	--
5.5		18...	9.0	--	41	3.3	3.5	1.0	1	1	--
		19...	9.0	--	1	7.6	3.5	.2	0	0	30
11532620 MILL CREEK NEAR CRESCENT CITY--CONTINUED											
7.7	FFR., 1974	G15...	9.0	--	--	6.1	3.7	--	0	10	--
7.9		G19...	10.0	--	--	3.2	1.9	--	0	2	--
7.2	MAR.	G26...	--	--	--	1.8	9.2	.1	0	3	--
7.2		G28...	--	--	--	1.9	1.2	.2	0	4	--
7.1	AUG.	01...	20.0	5	--	3.8	1.5	.1	0	4	--
7.5	SEP.	12...	16.0	2	--	1.6	.9	.1	0	1	--
7.4		23...	15.5	2	--	2.0	2.5	.2	1	1	--
7.7	JAN., 1975	07...	9.5	--	12	5.1	5.2	.6	1	10	--
		07...	9.5	--	11	--	6.0	.4	0	8	--
		08...	9.0	--	5	--	3.8	.2	0	2	--
7.2	MAR.	17...	9.0	--	13	--	4.2	--	0	0	--
7.1		18...	9.5	--	46	--	3.0	8.5	0	4	--
7.2		19...	9.0	--	12	14	1.4	.2	0	1	--
7.2	JULY	01...	14.0	--	6	2.1	.6	.0	0	2	--

TABLE 14.--Chemical analyses

DATE	TIME	INSTAN-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	DIS-	
		TANEOUS CHARGE (FT ³ /S)	SOLVED SILICA (SI02)	SOLVED ALUMINUM (AL)	SOLVED IRON (FE)	SOLVED CALCIUM (CA)	SOLVED NEONIUM (NA)	SOLVED SODIUM (NA)	SOLVED STUIM (K)	SOLVED TAS- RONATE (HCO3)	CAP- BONATE (CO3)	
11532626 MILL CREEK AT BRIDGE, NEAR CRESCENT CITY												
JAN., 1975												
07...	1615	1320	7.0	50	40	2.9	1.6	3.1	.5	11	--	
07...	2215	2150	4.8	60	30	3.8	1.6	2.8	.5	13	--	
08...	1220	1250	7.3	60	40	3.8	1.4	3.7	.6	15	--	
MAR.												
17...	1515	1550	6.6	90	50	7.7	1.5	2.8	.8	15	--	
18...	1330	6150	4.9	60	50	2.5	.7	2.5	.5	10	--	
19...	1330	1530	4.8	20	20	3.5	1.3	3.3	.6	14	--	
11532630 MILL CREEK AT MOUTH, NEAR CRESCENT CITY												
AUG., 1974												
01...	1220	7.0	6.6	10	40	6.4	1.6	4.3	.6	32	0	

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of water samples--Continued

CARBONATE (CO ₃) (MG/L)	ALKALINITY AS CACO ₃ (MG/L)	DIS-		DIS-		DIS-		DIS-		DIS-		DIS-	
		SOLVED (SO ₄) (MG/L)	CHLORIDE (Cl) (MG/L)	SOLVED (F) (MG/L)	FLUORIDE (RIDE) (MG/L)	SOLVED (N) (MG/L)	NITRATE (N) (MG/L)	SOLVED (N) (MG/L)	NITRITE (N) (MG/L)	AMMONIA (N) (MG/L)	ORGANIC (N) (MG/L)	KJEL. (N) (MG/L)	VEN. (P) (MG/L)

11532626 MILL CREEK AT BRIDGE, NEAR CRESCENT CITY--CONTINUED

JAN.. 1975													
--	07...	9	1.4	4.5	.0	.87	.00	.87	--	--	.43	.01	
--	07...	12	1.3	4.5	.0	.26	.00	.26	--	--	.97	.00	
--	08...	12	1.5	4.2	.0	.25	.00	.25	--	--	.32	.00	
MAR.													
--	17...	12	2.1	2.5	.1	3.9	.00	3.9	--	--	.34	.02	
--	18...	8	1.3	2.5	.1	.11	.00	.11	--	--	.13	.02	
--	19...	18	1.6	3.8	.1	.19	.00	.19	--	--	.18	.02	

11532630 MILL CREEK AT MOUTH, NEAR CRESCENT CITY--CONTINUED

AUG.. 1974													
0	01...	26	3.7	4.7	--	.00	.00	.00	.00	.21	.21	.01	

TABLE 14.--Chemical analyses

DATE	DIS-	DIS-	DIS-	DIS-	HARD-	NON-	SODIUM	SPE-		
	SOLVED ORTHO. PHOS- PHORUS (P)	SOLVED (SUM OF TUNTS)	SOLVED (TONS PER DAY)	SOLVED (TONS PER DAY)				AD-	CFIC	
	(MG/L)	(MG/L)	(AC-FT)	(MG/L)	(CA.MG)	NESS	PERCENT SODIUM (MG/L)	SOAP- TION RATIO	CON- DUCT- ANCE (MICRO- MHOS)	PH
11532626 MILL CREEK AT BRIDGE, NEAR CRESCENT CITY--CONTINUED										
JAN., 1975										
07...	.01	30	.04	107	14	5	32	.4	39	--
07...	.00	29	.04	168	16	5	27	.3	44	6.6
08...	.01	31	.04	105	15	3	33	.4	43	--
MAR.										
17...	.02	49	.07	205	25	13	19	.2	40	6.6
18...	.02	21	.03	349	9	1	36	.4	26	--
19...	.02	29	.04	120	14	3	33	.4	36	6.8
11532630 MILL CREEK AT MOUTH, NEAR CRESCENT CITY--CONTINUED										
AUG., 1974										
01...	--	44	.06	.83	23	0	29	.4	73	7.7

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water samples--Continued

PH JNITS)	CHFM- ICAL OXYGEN DEMAND TEMPER- ATURE DATE -	CHFM- ICAL OXYGEN DEMAND (LOW (HIGH LEVEL) (MG/L)	SOL- VFD CARBON DIOXIDE (CO ₂) (MG/L)	SUS- PENDED ORGANIC CARBON (C) (MG/L)	OTS- SOLVED CARBON MUM (CD) (UG/L)	OTS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)			
	(DEG C)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(UG/L)	(UG/L)	(UG/L)			
11532626 MILL CREEK AT BRIDGE, NEAR CRESCENT CITY--CONTINUED											
JUN. 1975											
--	7.0...	10.0	--	12	--	4.6	.4	1	20	--	20
6.6	7.0...	9.5	--	12	5.2	3.9	.8	0	2	--	10
--	8.0...	9.0	--	7	--	3.1	.3	1	3	--	10
6.6	8.7...	8.5	--	22	6.0	4.5	2.0	1	5	--	30
--	8.8...	9.5	--	25	--	4.0	3.3	1	4	--	60
6.8	9.9...	8.5	--	9	3.6	3.1	.2	0	0	--	30
11532630 MILL CREEK AT MOUTH, NEAR CRESCENT CITY--CONTINUED											
JUN. 1974											
7.7	9.1...	19.0	1	--	1.0	1.0	.9	0	3	--	20

TABLE 15.--Analyses of organic carbon in bottom material, Redwood Creek estuary

[See figure 3 for location of sampling stations]

Number	Station Name	Date	Time	Organic carbon in bottom material (g/kg)
411734124051301	Redwood Creek Estuary Site 1A, near Orick	September 26, 1974	1335	3.4
		September 22, 1975	1130	3.1
411734124051302	Redwood Creek Estuary Site 1B, near Orick	September 26, 1974	1340	3.9
		September 22, 1975	1215	8.2
411734124051303	Redwood Creek Estuary Site 1C, near Orick	September 26, 1974	1345	17
		September 22, 1975	1245	4.8
411734124051801	Redwood Creek Estuary Site 2A, near Orick	September 26, 1974	1350	8.5
		September 22, 1975	1445	2.7
411734124051802	Redwood Creek Estuary Site 2B, near Orick	September 26, 1974	1355	7.1
		September 22, 1975	1415	2.5
411734124051803	Redwood Creek Estuary Site 2C, near Orick	September 26, 1974	1400	.1
		September 22, 1975	1345	1.3
411732124051801	Redwood Creek Estuary Site 3A, near Orick	September 26, 1974	1410	.7
411732124051802	Redwood Creek Estuary Site 3B, near Orick	September 26, 1974	1415	.9
411732124051803	Redwood Creek Estuary Site 3C, near Orick	September 26, 1974	1420	1.7
-	Redwood Creek Estuary Site 4A, near Orick	September 26, 1974	1500	3.4
-	Redwood Creek Estuary Site 4B, near Orick	September 22, 1975	1630	.7
-	Redwood Creek Estuary Site 4C, near Orick	September 26, 1974	1505	6.1
-		September 22, 1975	1635	1.4
				12
				.8

Pesticides

Pesticides are chemical compounds used to control undesirable animals and plants. Insecticide and herbicide are the specific terms applied to the chemical compounds that affect animals and plants, respectively. The determination of the concentration of pesticides is important in environmental studies because of the widespread and abundant use of pesticides and their detrimental effects on the life processes of organisms. Pesticides usually persist in the environment because of slow degradation rates. In the aquatic environment, many pesticides are only slightly soluble; however, they readily sorb on sediment particles and can be retained in the aquatic ecosystem for long periods of time.

Bottom-sediment samples for pesticide analysis (table 16) were collected from 10 sampling stations located in the Redwood Creek drainage basin. Individual laboratory-prepared widemouth glass bottles were used as scoops to collect each bottom-sediment sample. After collection, each sample was iced and mailed within 24 hours to the Geological Survey Central Laboratory, Denver, Colo., for analysis using the procedures outlined in Goerlitz and Brown (1972, p. 24).

Rainwater

The chemical composition of rainwater is complex and highly variable from area to area, from storm to storm, and even from shower to shower during a storm. The chemical constituents found in rainwater are derived from a variety of atmospheric, oceanic, and terrestrial sources. The types and concentrations of chemical constituents contained in rainwater can influence the quality of surface water. Rainwater, for example, can be a source of chemical elements and compounds essential for plant growth and reproduction.

Rainwater for chemical analysis was collected at selected stations during the storm period February 5-9, 1975 (table 17). The rainwater was collected with a glass funnel placed in a glass bottle. Glass wool was inserted into the neck of the funnel to prevent the entrance of leaf litter and insects. The glass bottle was covered with aluminum foil to prevent the entrance of light and thus to reduce algal growth. Each bottle was placed in an open (nonforested) area with the exception of the Lost Man Creek station which was located in old growth redwood forest. The collected rainwater represented a composite sample for the storm at each selected sampling station. Rainwater samples collected were analyzed for total nitrate, nitrite, and phosphorus; specific conductance; and dissolved organic carbon. Unfiltered rainwater samples for total nitrate, nitrite, and phosphorus, and specific conductance were iced, shipped to the Geological Survey Central Laboratory at Salt Lake City, Utah, and analyzed following the procedures outline by Brown and others (1970). The filtering, treating, and the analytical procedures used for the determination of dissolved organic-carbon concentration were discussed previously.

TABLE 16.--Concentration of pesticides in bottom sediment, Redwood Creek drainage basin, July 1974

[See figure 2 for location of sampling stations]

Number	Station Name	Date	Time	Concentration (micrograms per kilogram)	Pesticide types analyzed in bottom sediment
11482200	Redwood Creek at South Park Boundary, near Orick	July 1, 1974	1200	0.0	Organochlorine insecticides: Aldrin, chlordane, DDD, DDE, DDT, dieldrin, endrin heptachlor, heptachlor epoxide, lindane, and toxaphene
11482225	Harry Wier Creek near Orick	July 2, 1974.	1515	0.0	Phosphorothioate insecticides: Diazinon, ethion, malathion, methyl parathion, methyl trithion parathion, and trithion
11482230	Tom McDonald Creek near Orick	July 2, 1974	1330	0.0	Chlorophenoxy acid herbicides: 2,4-D, and 2,4,5-T, and silvex
11482240	Fortyfour Creek near Orick	July 2, 1974	1205	0.0	Industrial chemicals: Polychlorinated biphenyls (PCB), and polychlorinated naphthalene (PCN)
11482250	Miller Creek near Orick	July 3, 1974	0945	0.0	
11482260	Miller Creek at mouth, near Orick	July 2, 1974	1100	0.0	
11482330	Hayes Creek near Orick	July 1, 1974	1515	0.0	
11482450	Lost Man Creek near Orick	July 3, 1974	1130	0.0	
11482470	Little Lost Man Creek near Orick	July 3, 1974	1220	0.0	
11482475	Geneva Creek near Orick	July 1, 1974	1615	0.0	

TABLE 17.--Chemical analyses of rainfall, February 5-9, 1975

[See figure 2 for location of sampling stations]

Number	Station Name	Total nitrate as N (mg/l)	Total nitrite as N (mg/l)	Total phosphorus as P (mg/l)	Specific conductance (micromhos at 25°C)	Dissolved organic carbon (mg/l)
11482225	Harry Wier Creek near Orick	0.04	0.01	0.06	32	2.2
11482250	Miller Creek near Orick	.05	.00	.06	26	1.0
11482450	Lost Man Creek near Orick	.04	.00	.04	27	.6
11482468	Little Lost Man Creek at Site No. 2, near Orick	.04	.01	.06	35	.8

Biological Data

Bacteria

Bacteria are used as biological indicators for the assessment of the sanitary quality of water to determine its suitability for human use. The presence of fecal coliform and fecal streptococcal bacteria indicates fecal-waste contamination by warm-blooded animals.

The membrane filter incubation method was used in determining fecal coliform and fecal streptococcal bacteria colony densities from water samples collected at selected stations in the Redwood Creek and Mill Creek drainage basins. Water samples were collected in sterilized glass bottles at the estimated centroid of flow of each stream, iced, and filtered at the laboratory within 6 hours after sample collection. Membrane filters (0.45-micrometer pore size) were used to retain the bacteria during filtration. The filters for fecal coliform bacteria analysis were placed on M-FC agar plates and incubated at 44.5°C for 22 hours; the filters for fecal streptococcal bacteria analysis were placed on M-Enterococcus agar plates and incubated at 35°C for 48 hours (Slack and others, 1973). After the prescribed incubation period, the filters were removed from the incubator and the bacterial colonies were counted (table 18) following the methods described by Slack and others (1973, p. 30).

Benthic Invertebrates

Benthic invertebrates represent the community of organisms without backbones that live in or on the bottom of lakes and streams. Because benthic invertebrates inhabit specific types of habitats and are sensitive to water-quality changes, they are often used as biological indicators of both recent and present environmental conditions.

Benthic invertebrates were collected with a Surber 1-ft² (0.09 m²) sampler or an Ekman dredge (225 mm²) (figs. 2, 3, and 4) (Slack and others, 1973, p. 144). In the field, the material collected by the sampler was emptied into a bucket, washed onto a number 70 wire sieve (210-μm mesh opening) and placed in polyethylene containers containing 10 percent formalin. In the laboratory, the benthic invertebrates were separated from detritus by the flotation technique, identified, and enumerated at Sacramento, Calif., using selected taxonomic references⁴ and the methods described by Slack and others (1973, p. 126). For this study the majority of benthic invertebrates (table 19, in pocket) were classified to genus based on the taxonomic scheme of Borror and DeLong (1971). All benthic invertebrate samples are being held in a reference file and are available for additional taxonomic classification.

⁴Borror and DeLong (1971); Edmondson (1959); Edmunds and others (1963); Gaufin and others (1972); Jewett (1960); Johannsen (1969); Mason (1973); Pennak (1953); Ross (1944); Smith and Carlton (1975); Usinger (1973).

TABLE 18.--Bacteria analyses of water samples

[See figure 2 for location of sampling stations]

Station		Date	Time	Bacteria (col/100 ml)	
Number	Name			Fecal coliform	Fecal streptococci
11481500	Redwood Creek near Blue Lake	July 18, 1974	1000	126	13
		July 26, 1974	0930	11	24
		June 10, 1975	1200	17	16
		July 31, 1975	1245	16	17
11482020	Redwood Creek at Redwood Valley Bridge, near Blue Lake	July 18, 1974	1300	124	18
		July 26, 1974	1015	1<1	34
		June 10, 1975	1130	22	21
		July 31, 1975	1230	13	52
11482120	Redwood Creek above Panther Creek, near Orick	July 18, 1974	1610	17	-
		July 26, 1974	0930	147	280
		June 10, 1975	1245	14	18
		July 31, 1975	1215	17	50
11482200	Redwood Creek at South Park Boundary, near Orick	July 19, 1974	1200	15	12
		July 26, 1974	0930	12	26
		September 11, 1974	1315	1<1	12
		June 10, 1975	1145	18	14
		July 31, 1975	1210	12	18
11482220	Redwood Creek above Harry Wier Creek, near Orick	July 31, 1975	1400	11	11
11482225	Harry Wier Creek near Orick	July 19, 1974	1200	19	14
		September 11, 1974	1200	1<1	26
		July 31, 1975	1400	11	190
11482250	Miller Creek near Orick	July 19, 1974	1200	30	1<1
		September 11, 1974	1200	16	16
11482260	Miller Creek at mouth, near Orick	July 19, 1974	1200	12	13
		September 11, 1974	1300	1<1	11
11482330	Hayes Creek near Orick	July 19, 1974	1200	10	16
-	2Redwood Creek above Prairie Creek, near Orick	July 26, 1974	1030	29	11
		June 10, 1975	1045	18	15
11482450	Lost Man Creek near Orick	July 19, 1974	1230	11	1<1
		September 11, 1974	1200	1<1	16
11482468	Little Lost Man Creek at Site No. 2, near Orick	July 19, 1974	1200	13	11
		September 11, 1974	1200	14	19
		July 31, 1975	1200	1<1	18
-	2Prairie Creek near Orick	July 26, 1974	1045	22	1753
		June 10, 1975	1030	220	111
11482500	Redwood Creek at Orick	July 19, 1974	1200	46	32
		July 26, 1974	1035	113	160
		September 11, 1974	1200	114	62
		June 10, 1975	1000	24	16
		July 31, 1975	1320	14	12

See footnotes at end of table.

TABLE 18.--*Bacteria analyses of water samples--Continued*

Number	Station Name	Date	Time	Bacteria (col/100 ml)	
				Fecal coliform	Fecal streptococci
11532602	West Branch Mill Creek below Red Alder Campground, near Crescent City	August 13, 1974	1330	13	14
11532610	East Fork Mill Creek near Crescent City	August 13, 1974	1100	17	13
11532620	Mill Creek near Crescent City	August 13, 1974	1200	18	14
11532630	Mill Creek at mouth, near Crescent City	August 13, 1974	1000	13	21

¹Count based on nonideal number of colonies in sample (Slack and others, 1973).²Auxiliary sampling stations. Locations not shown in figure 2.

Fish

Fish are important organisms in the aquatic environment because they occupy the upper levels of the aquatic food chain. Fish populations are often used as indicators of water quality. The abundance, species composition, and condition of fish are directly and indirectly affected by physical and chemical changes in the aquatic environment. For example, many species of fish have stringent temperature and dissolved-oxygen requirements for survival. Large deviations from these requirements can result in fish mortality and cause a change in the species composition of the fish population.

Fish were collected by using a 50-ft (15-m) straight seine, 5 ft (1.5 m) deep with 0.25-in (6-mm) mesh opening, and a backpack electrofishing unit. The sampling techniques outlined in Slack and others (1973, p. 151) were followed during the survey. After collection, the fish (table 20) were anesthetized with tricaine methanesulfonate, identified in the field,⁵ and released. Fork lengths and weights were determined for the majority of the salmonid fish captured.

⁵Some fish were difficult to identify and were preserved in 10 percent formalin and brought back to the laboratory at Sacramento, Calif., for identification using selected taxonomic references, Clemens and Wilby (1961); Eddy (1969); Kimsey and Fisk (1960); Miller and Lea (1972).

TABLE 20.--Taxa and number of fish

Sampling area and date	Genus species (common name)	Length (mm)	Weight (g)	Length (mm)	Weight (g)	Length (mm)	Weight (g)	Number captured
<u>Spring 1974</u>								
Bridge Creek near mouth May 23, 1974	<i>Cottus aleuticus</i> (coastrange sculpin)				No data			3
Harry Wier Creek near mouth May 23, 1974	<i>Salmo gairdneri</i> (steelhead trout)	113	18.0	91	8.0	39	<1	3
	<i>Cottus aleuticus</i> (coastrange sculpin)				No data			1
Tom McDonald Creek near mouth May 24, 1974	<i>Oncorhynchus kisutch</i> (coho salmon)	49	<1	47	<1	46	<1	15
		44	<1	44	<1	43	<1	
		39	<1	39	<1	37	<1	
		35	<1	34	<1	33	<1	
		33	<1	33	<1	32	<1	
	<i>Cottus aleuticus</i> (coastrange sculpin)				No data			3
	<i>Gasterosteus aculeatus</i> (threespine stickleback)				No data			1
Miller Creek near mouth May 24, 1974	<i>Salmo gairdneri</i> (steelhead trout)	95	8.0	47	<1			2
	<i>Oncorhynchus kisutch</i> (coho salmon)	39	<1					1
Redwood Creek near Hayes Creek May 22, 1974	<i>Cottus aleuticus</i> (coastrange sculpin)				No data			5
	<i>Oncorhynchus kisutch</i> (coho salmon)	50	<1					1
Little Lost Man Creek near mouth May 22, 1974	<i>Salmo gairdneri</i> (steelhead trout)	160	51.0	147	42.0	114	16.0	19
		111	12.5	110	18.0	110	18.0	
		104	11.0	97	11.0	97	11.0	
		93	11.0	85	7.0	85	6.0	
		82	6.0	78	5.0	75	4.0	
		75	1.5	72	5.0	68	1.0	
		63	1.5					
	<i>Oncorhynchus kisutch</i> (coho salmon)	77	4.0	64	1.0	57	<1	10
		52	<1	51	<1	50	1.0	
		50	<1	50	<1	43	<1	
		39	<1					
	<i>Gasterosteus aculeatus</i> (threespine stickleback)				No data			10

TABLE 20.--Taxa and number of fish--Continued

Sampling area and date	Genus species (common name)	Length (mm)	Weight (g)	Length (mm)	Weight (g)	Length (mm)	Weight (g)	Number captured
<u>Spring 1974--continued</u>								
Hill Creek near recording gage May 25, 1974	<i>Salmo gairdneri</i> (steelhead trout)	118 101 81 50 48 45 44 44 42 42 40 40 38 34 31	21.0 11.0 6.0 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	106 84 61 49 48 45 44 43 42 41 40 39 38 33 28	13.0 5.0 1.5 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	103 82 50 48 48 45 44 43 42 41 40 39 34 33 33	13.0 5.0 <1 1.0 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	44
	<i>Entosphenus tridentatus</i> (Pacific lamprey-ammocete)				No data			7
	<i>Cottus aleuticus</i> (coastrange sculpin)				No data			6
	<i>Oncorhynchus kisutch</i> (coho salmon)	55 42	1.0 <1	55	1.0	50	<1	4
<u>Summer 1974</u>								
Redwood Creek near Redwood Valley Bridge August 2, 1974	<i>Salmo gairdneri</i> (steelhead trout)	145 135 132 119 93 84 76 75 71 70 68 66 65 65 64 63 63 61 60 60 59 58 58 58 56 55	37.1 31.8 27.3 20.5 10.0 7.1 5.3 4.8 4.1 4.1 3.2 2.8 3.0 2.8 2.7 3.0 2.8 1.9 2.2 2.0 1.8 2.0 1.9 5.8 1.1 2.0 1.9	145 134 120 108 92 77 76 72 70 69 67 66 65 65 64 63 63 62 61 60 59 58 58 57 56 55	33.2 29.5 20.6 15.5 9.2 6.6 5.2 3.9 4.5 3.6 2.9 2.7 3.0 1.8 2.3 2.7 3.2 3.2 3.2 2.1 1.9 2.1 1.9 2.2 1.8 2.0 1.2 1.8	137 132 120 98 86 77 75 71 70 68 67 66 65 64 63 63 62 60 60 59 58 58 56 55	31.0 30.0 20.5 10.5 8.6 5.2 5.2 6.1 4.1 3.3 1.8 2.5 3.0 2.7 3.2 2.6 2.0 2.3 1.8 2.0 1.8 2.0 1.8 1.5	109

TABLE 20.--*Taxa and number of fish--Continued*

Sampling area and date	Genus species (common name)	Length (mm)	Weight (g)	Length (mm)	Weight (g)	Length (mm)	Weight (g)	Number captured
Summer 1974--continued								
Redwood Creek near Redwood Valley Bridge August 2, 1974 --continued	<i>Salmo gairdneri</i> (steelhead trout)-- continued	55 54 53 51 50 48 47 46 44 43 40	1.5 1.2 .8 1.4 2.1 1.3 .8 1.1 1.2 1.4 .2	55 53 53 51 50 48 46 46 44 43 40	1.2 2.1 .8 1.2 1.6 .7 1.4 .5 .7 1.3 1.2	54 53 51 51 48 47 46 44 44 40	1.9 1.5 1.8 1.2 1.3 1.2 1.2 1.8 .4 .7	
	<i>Catostomus humboldtianus</i> (Humboldt sucker)				No data			24
	<i>Gasterosteus aculeatus</i> (threespine stickleback)				No data			1
Redwood Creek below Harry Wier Creek July 30, 1974	<i>Salmo gairdneri</i> (steelhead trout)	93 75 71 69 66 65 64 63 61 59 58 58 57 56 54 53 51 50 48 45	9.1 4.7 4.0 4.0 3.1 2.4 2.8 1.8 1.6 1.5 2.2 1.5 1.7 .9 .8 .9 1.4 1.2 1.2 .5	87 72 71 68 66 	7.6 4.0 3.3 2.6 2.2 2.4 3.0 3.2 1.8 1.1 1.5 2.1 2.1 1.5 1.8 1.8 1.2 1.2 .5 .8	85 71 69 66 65 65 63 63 59 58 58 57 56 54 53 52 50 49 47 42	6.8 4.1 4.0 3.3 3.7 1.9 2.4 2.8 1.7 2.2 1.5 2.0 .9 1.5 1.4 .5 1.2 1.1 1.0 .6	60
	<i>Gasterosteus aculeatus</i> (threespine stickleback)				No data			27
	<i>Catostomus humboldtianus</i> (Humboldt sucker)				No data			15
	<i>Cottus aleuticus</i> (coastrange sculpin)				No data			1

TABLE 20.--Taxa and number of fish--Continued

Sampling area and date	Genus species (common name)	Length (mm)	Weight (g)	Length (mm)	Weight (g)	Length (mm)	Weight (g)	Number captured
<u>Summer 1974--continued</u>								
Redwood Creek near Hayes Creek July 29, 1974	<i>Casterosteus</i> <i>aculeatus</i> (threespine stickleback)			No data				59
	<i>Salmo gairdneri</i> (steelhead trout)	146	31.0	141	30.0	134	26.5	46
		133	25.0	130	23.0	123	19.8	
		122	22.0	122	18.0	119	18.0	
		119	17.5	118	15.5	99	9.8	
		88	7.0	87	6.8	84	6.5	
		84	5.5	77	4.2	77	4.0	
		76	4.3	75	4.3	73	4.1	
		73	3.5	70	3.5	70	3.0	
		68	3.2	68	2.7	65	2.3	
		64	2.8	64	2.4	64	2.3	
		64	2.2	63	2.8	62	2.3	
		62	1.4	61	1.8	60	1.9	
		60	1.5	60	1.2	59	1.6	
		59	1.5	58	.9	56	1.1	
		56	1.0	55	1.4	54	1.0	
		49	.6					
	<i>Catostomus</i> <i>humboldtianus</i> (Humboldt sucker)			No data				39
	<i>Oncorhynchus kisutch</i> (coho salmon)	95	10.5	81	5.5	70	4.0	9
		68	3.5	65	2.7	63	2.4	
		56	1.3	52	.9	51	1.0	
	<i>Oncorhynchus</i> <i>tshawytscha</i> (king salmon)	96	10.0	84	6.0	80	5.5	3
	<i>Cottus aleuticus</i> (coastrange sculpin)			No data				2
<u>Summer 1975</u>								
Redwood Creek near Redwood Valley Bridge July 25, 1975	<i>Catostomus</i> <i>humboldtianus</i> (Humboldt sucker)			No data				19
	<i>Salmo gairdneri</i> (steelhead trout)	58	-	58	-	56	-	13
		51	-	48	-	48	-	
		46	-	46	-	46	-	
		46	-	46	-	43	-	
		43	-					
Redwood Creek near mouth of Copper Creek July 24, 1975	<i>Salmo gairdneri</i> (steelhead trout)	56	-	56	-	48	-	11
		48	-	46	-	43	-	
		41	-	41	-	36	-	
		36	-	28	-			

TABLE 20.--Taxa and number of fish--Continued

Sampling area and date	Genus species (common name)	Length (mm)	Weight (g)	Length (mm)	Weight (g)	Length (mm)	Weight (g)	Number captured
<u>Summer 1975--continued</u>								
Copper Creek near mouth July 24, 1975	<i>Salmo gairdneri</i> (steelhead trout)	94	-	48	-	48	-	42
		46	-	46	-	43	-	
		43	-	43	-	41	-	
		41	-	41	-	41	-	
		41	-	36	-	36	-	
		36	-	36	-	36	-	
		36	-	36	-	36	-	
		36	-	33	-	33	-	
		33	-	33	-	33	-	
		33	-	33	-	33	-	
		33	-	33	-	33	-	
		30	-	30	-	30	-	
		30	-	30	-	30	-	
		30	-	30	-	25	-	
Bridge Creek near mouth July 17, 1975	<i>Salmo gairdneri</i> (steelhead trout)	135	-	112	-	107	-	16
		99	-	86	-	84	-	
		43	-	41	-	33	-	
		33	-	33	-	33	-	
		30	-	30	-	28	-	
		25	-					
Harry Wier Creek near mouth July 16, 1975	<i>Salmo gairdneri</i> (steelhead trout)	48	-	48	-	46	-	16
		43	-	43	-	41	-	
		38	-	38	-	38	-	
		36	-	36	-	36	-	
		36	-	33	-	30	-	
		30	-					
Tom McDonald Creek near mouth July 21, 1975	<i>Salmo gairdneri</i> (steelhead trout)	173	-	152	-	145	-	44
		135	-	137	-	112	-	
		99	-	91	-	86	-	
		56	-	53	-	51	-	
		51	-	48	-	48	-	
		48	-	46	-	46	-	
		43	-	43	-	43	-	
		41	-	41	-	41	-	
		41	-	38	-	38	-	
		38	-	38	-	38	-	
		36	-	36	-	36	-	
		36	-	36	-	33	-	
		33	-	33	-	33	-	
		33	-	30	-	30	-	
		30	-	28	-			
	<i>Cottus aleuticus</i> (coastrange sculpin)			No data				19
	<i>Gasterosteus</i> <i>aculeatus</i> (threespine stickleback)			No data				5

TABLE 20.--Taxa and number of fish--Continued

TABLE 20.--Taxa and number of fish--Continued

Sampling area and date	Genus species (common name)	Length (mm)	Weight (g)	Length (mm)	Weight (g)	Length (mm)	Weight (g)	Number captured
<u>Autumn 1975--continued</u>								
Redwood Creek near Redwood Valley Bridge Sept. 26, 1975-- continued	<i>Salmo gairdneri</i> (steelhead trout)-- continued	82 81 80 78 72	6.5 6.3 6.7 7.3 4.4	81 80 80 74 72	7.8 7.3 6.5 5.0 4.2	81 80 79 74 72	6.4 6.9 6.5 4.6 	
	<i>Castostomus humboldtianus</i> (Humboldt sucker)						Observed only	
	<i>Entosphenus tridentatus</i> (Pacific lamprey- ammocete)						Observed only	
Redwood Creek near mouth of Copper Creek Sept. 24, 1975	<i>Catostomus humboldtianus</i> (Humboldt sucker)						No data	14
	<i>Salmo gairdneri</i> (steelhead trout)	110 69	18.5 3.5	102 63	16.5 3.6	95	12.5	5
Copper Creek near mouth Sept. 24, 1975	<i>Salmo gairdneri</i> (steelhead trout)	73 64 60 57 56 55 54 51 50 48 47 47 46 43	5.1 3.6 3.2 3.4 3.0 2.3 2.6 1.7 1.5 1.8 2.0 1.7 1.7 1.5 1.0	68 61 59 57 56 55 52 50 49 48 47 46 45	4.5 3.8 3.1 3.2 2.8 2.0 2.6 2.2 2.0 1.7 1.8 1.7 1.7 1.2	68 61 59 57 55 54 51 50 48 48 47 46 44	3.7 2.8 2.9 2.7 2.9 3.6 2.1 1.8 1.9 1.3 1.8 1.6 1.4	40
Bridge Creek near mouth Sept. 25, 1975	<i>Salmo gairdneri</i> (steelhead trout)	126 100 79 75 73 70 69 67 65 63 60 57 56 55 54 52	22.6 11.1 5.8 4.9 5.6 4.8 4.7 3.4 4.6 2.9 3.2 2.4 2.6 2.3 3.6 2.1	118 87 75 74 73 70 67 66 65 62 59 57 56 55 54 51	17.9 7.4 6.6 6.8 5.5 4.1 5.0 4.3 2.9 3.0 2.3 2.1 2.5 2.2 1.9 1.5	100 79 75 74 73 69 67 66 64 62 58 56 56 55 53 50	12.2 6.4 5.8 5.0 5.4 4.7 3.9 3.6 3.1 2.9 2.7 3.3 2.3 1.9 3.2 2.1	48

TABLE 20.--Taxa and number of fish--Continued

Sampling area and date	Genus species (common name)	Length (mm)	Weight (g)	Length (mm)	Weight (g)	Length (mm)	Weight (g)	Number captured
<u>Autumn 1975--continued</u>								
Bridge Creek near mouth Sept. 25, 1975 --continued	<i>Cottus aleuticus</i> (coastrange sculpin) <i>Catostomus</i> <i>humboldtianus</i> (Humboldt sucker)		No data					11
Harry Wier Creek near mouth Sept. 25, 1975	<i>Salmo gairdneri</i> (steelhead trout)	117 63 59 56 55 54 52 51 51 50 49 48 47 46 45 43 41	21.4 3.3 2.4 2.1 1.9 1.1 1.6 2.0 1.6 1.5 1.5 1.2 1.5 1.5 .9 1.1 .7	103 60 58 56 54 	10.7 2.7 2.0 2.0 1.9 1.3 1.5 1.9 1.4 1.2 1.4 1.0 1.0 48 1.0 1.7 .8 .9	64 59 56 56 54 53 51 51 51 49 48 47 47 46 44 42 41	2.6 2.7 3.0 2.0 1.7 1.3 2.1 1.8 .9 1.6 1.4 1.7 1.0 	50
	<i>Cottus aleuticus</i> (coastrange sculpin)		No data					3
	<i>Catostomus</i> <i>humboldtianus</i> (Humboldt sucker)		No data					1
Tom McDonald Creek near mouth Sept. 25, 1975	<i>Salmo gairdneri</i> (steelhead trout)	158 110 81 76 72 70 66 64 63 60 59 58 57 56 54 52 51	44.2 15.6 5.2 4.5 3.5 4.5 3.7 3.7 2.4 2.1 2.0 2.2 2.0 1.9 1.8 2.5 .7	140 96 77 75 72 	30.0 11.7 4.6 7.0 2.6 3.0 3.4 3.5 2.5 2.0 1.9 2.5 1.9 2.2 1.5 1.1 1.0	121 88 76 74 70 67 64 64 60 59 58 57 57 55 54 51	22.8 9.6 6.3 5.3 4.9 2.5 4.6 3.1 2.8 4.0 2.9 2.4 1.7 1.6 1.2 1.5	50
	<i>Cottus aleuticus</i> (coastrange sculpin)		No data					6
	<i>Entosphenus</i> <i>tridentatus</i> (Pacific longray- ammocete)		Observed only					

TABLE 20.--Taxa and number of fish--Continued

Sampling area and date	Genus species (common name)	Length (mm)	Weight (g)	Length (mm)	Weight (g)	Length (mm)	Weight (g)	Number captured
<u>Autumn 1975--continued</u>								
Little Lost Man Creek near mouth Sept. 24, 1975	<i>Salmo gairdneri</i> (steelhead trout)	236 123 117 102 83 74 73 71 70 68 66 62 60	147.3 21.5 18.1 12.3 6.7 7.4 4.6 6.0 2.5 3.3 3.9 1.4 4.6	138 120 116 101 76 74 73 71 68 67 64 61 60	28.0 21.7 20.7 10.3 6.3 3.9 4.2 5.0 3.6 3.5 3.0 2.6 3.0	134 120 104 89 75 73 73 70 68 66 62 61 60	28.7 19.1 10.0 7.8 5.2 5.0 4.2 5.8 3.6 5.2 3.0 2.2 2.7	39
	<i>Gasterosteus aculeatus</i> (threespine stickleback)						Observed only	
	<i>Entosphenus tridentatus</i> (Pacific lamprey-ammocete)						Observed only	

Periphyton

Periphyton is the assemblage of organisms that attach to or live on underwater substrates and includes algae, bacteria, fungi, protozoans, rotifers, and other small organisms. The abundance and diversity of the periphyton community can provide an indication of water quality. For example, increased nutrients can stimulate algal growth. Algal mats may result from excessive growth of algae. These mats can become esthetically unpleasing and can also degrade water-quality conditions.

Periphyton samples were collected on artificial substrates made of clear acrylic strips. Each artificial substrate was anchored securely to the stream bottom at each sampling station. After a sufficient period for periphyton colonization, the artificial substrate was removed from the stream. While still wet, a known area of periphyton was scraped from each substrate. This periphyton sample was preserved with Lugol's solution (Slack and others, 1973, p. 89) and sent to a commercial laboratory for species identification and enumeration (table 21, in pocket) using an Utermohl chamber (Utermohl, 1958), the method described in Slack and others (1973, p. 91), and selected taxonomic references.⁶ The remaining periphyton attached to the artificial substrate was air dried and returned to the laboratory in Menlo Park, Calif., for biomass analysis (table 22) following the methods outlined in Slack and others (1973, p. 91).

Phytoplankton

The aggregate of passively drifting organisms in a body of water is collectively called plankton. Phytoplankton specifically are the plant organisms in plankton. The abundance and species composition of phytoplankton can be related to the quality of the water at the time of sampling because of the direct association between the plant organisms and the water in which they are suspended. Phytoplankton can affect water conditions such as pH, dissolved-oxygen concentrations, and the optical properties of the water. Under certain conditions, algal blooms may occur and cause the water to become esthetically objectionable.

Water samples for phytoplankton analysis (table 23, in pocket) were collected in 1-liter polyethylene bottles at the estimated centroid of flow of each stream. Each sample was preserved with 10-ml of Lugol's solution (Slack and others, 1973, p. 70). Phytoplankton were identified and enumerated at a commercial laboratory using the inverted microscope method described in Slack and others (1973, p. 72) and selected taxonomic references.⁷

⁶Bourrelly (1966, 1968, 1970); Edmondson (1959); Hustedt (1930); Patrick and Reimer (1966); Pennak (1953); Prescott (1954, 1962); Smith (1950); Weber (1971).

⁷Bourrelly (1966, 1968, 1970); Edmondson (1959); Hustedt (1930); Patrick and Reimer (1966); Prescott (1954, 1962); Smith (1950); Weber (1971).

TABLE 22.--Analyses of periphyton biomass

[See figures 2 and 4 for location of stations. Percentage organic content was calculated from total and organic weights prior to rounding to standard significant figures (Slack and others, 1973)]

STATION		Sampler		Periphyton			
Number	Name	Installed	Removed	Weight		Percentage organic	
				Total (g/m ²)	Organic (g/m ²)		
11482200	Redwood Creek at South Park Boundary, near Orick	May 9, 1974	July 16, 1974	8.5	2.1	25	
		July 16, 1974	September 13, 1974	2.8	1.7	61	
		July 30, 1975	September 5, 1975	3.0	1.2	42	Spring 1975 sampler missing
11482210	Bridge Creek near Orick	May 13, 1974	July 15, 1974	1.3	.4	3	
		July 15, 1974	September 16, 1974	27	8.8	33	
		June 7, 1975	July 31, 1975	32	2.8	8.9	
11482225	Harry Wier Creek near Orick	May 13, 1974	July 15, 1974	6.2	1.6	26	
		July 15, 1974	September 16, 1974	7.4	1.8	24	
		June 1, 1975	July 31, 1975	12	1.4	12	
11482250	Miller Creek near Orick	May 10, 1974	July 16, 1974	2.3	.6	26	
		July 16, 1974	September 17, 1974	2.8	1.0	35	
		May 31, 1975	July 28, 1975	1.1	.0	.0	
11482260	Miller Creek at mouth, near Orick	May 14, 1974	July 16, 1974	75	4.2	5.6	
		July 16, 1974	September 17, 1974	58	4.4	7.7	
		May 31, 1975	July 28, 1975	1.6	.6	39	
1 ¹	Redwood Creek above Hayes Creek, near Orick	May 15, 1974	July 15, 1974	6.8	1.0	15	
		July 15, 1974	September 14, 1974	97	27	28	
		August 1, 1975	September 5, 1975	93	19	21	Spring 1975 samplers missing
11482330	Hayes Creek near Orick	May 15, 1974	July 15, 1974	3.8	.1	2.1	
		July 15, 1974	September 14, 1974	.8	.2	25	
11482450	Lost Man Creek near Orick	May 10, 1974	July 15, 1974	3.2	1.4	46	
		July 15, 1974	September 15, 1974	7.5	2.4	32	
		June 2, 1975	July 27, 1975	2.7	1.1	40	
11482468	Little Lost Man Creek at Site No. 2, near Orick	July 15, 1974	Spring 1974 samplers missing				
		June 2, 1975	September 14, 1974	28	6.6	24	
			July 27, 1975	5.4	2.0	38	
11532602	West Branch Mill Creek below Red Alder Campground, near Crescent City	May 21, 1974	July 16, 1974	19	6.2	33	
		July 16, 1974	September 12, 1974	4.8	2.2	45	
		June 5, 1975	July 29, 1975	7.2	3.5	49	
11532610	East Fork Mill Creek near Crescent City	May 21, 1974	July 16, 1974	3.0	1.3	43	
		July 16, 1974	September 12, 1974	4.0	2.1	52	
		June 5, 1975	July 29, 1975	2.6	1.1	41	
11532620	Mill Creek near Crescent City	May 20, 1974	July 16, 1974	5.7	2.8	49	
		July 16, 1974	September 12, 1974	9.8	4.2	43	
		June 5, 1975	July 29, 1975	5.5	3.2	59	

¹Auxiliary sampling site.

Seston

Seston is the suspended organic and inorganic matter in water. The measurement of seston is important because the organic content is equivalent to suspended organic carbon and can indicate, in part, the biological productivity and potential chemical energy in the aquatic environment.

Water samples for seston analysis were point samples, collected in 2-liter polyethylene bottles near the estimated centroid of flow of each stream. A measured volume of water from each sample was passed through a tared Whatman GF/C grade glass-membrane filter and dried at 75°C. The increase in the weight of the filter after drying was considered the total (organic and inorganic) dry weight of seston. After ashing the dry residue on the filter at 500°C, the difference between the total dry weight and ash weight of seston was assumed to be organic weight (lost as carbon dioxide) of seston. The percentage of the organic weight of seston for each sample was also calculated. Standardized procedures in Slack and others (1973, p. 54) were followed in determining the seston concentrations of water samples collected from selected stations in the Redwood Creek and Mill Creek drainage basins (table 24).

TABLE 24.--Seston analyses of water samples

[See figures 2, 3, and 4 for location of stations. Percentage organic content was calculated from total and organic weights prior to rounding to standard significant figures (Slack and others, 1973)]

Station					Seston			
Number	Name	Date	Time	Weight		Percentage		
				Total (mg/l)	Organic (mg/l)	Organic	Organic	
11481500	Redwood Creek near Blue Lake	July	18, 1974	1000	1.3	0.2	15	
11482020	Redwood Creek at Redwood Valley Bridge, near Blue Lake	July	18, 1974	1255	1.9	.2	11	
11482120	Redwood Creek above Panther Creek, near Orick	July	18, 1974	1410	1.5	.0	.0	
11482140	High-Slope Schist Creek near Orick	July	23, 1974	1145	2.9	1.1	38	
11482160	Copper Creek near Orick	April	16, 1974	1400	11	.0	.0	
11482200	Redwood Creek at South Park Boundary, near Orick	July	18, 1974	2400	.0	.0	.0	
		July	19, 1974	1200	.4	.0	.0	
		July	22, 1974	1230	.8	.3	38	
		September	11, 1974	1200	3.3	2.2	71	
		September	13, 1974	1300	1.7	1.4	82	
		June	3, 1975	1415	15	.5	3.3	
		June	8, 1975	1145	8.1	.2	2.5	
11482210	Bridge Creek near Orick	April	26, 1974	1100	.0	.0	.0	
		July	23, 1974	1230	.5	.2	40	
11482225	Harry Wier Creek near Orick	April	12, 1974	1530	7.3	.0	.0	
		July	18, 1974	2400	.4	.0	.0	
		July	19, 1974	1200	.5	.0	.0	
		September	11, 1974	1200	3.9	1.9	49	
		September	16, 1974	1330	11	1.4	12	
		November	7, 1974	0455	4.4	.4	9.1	
		November	7, 1974	0555	8.7	.4	4.6	
		November	7, 1974	0655	18	.8	4.3	
		November	7, 1974	0755	12	1.2	10	
		November	7, 1974	0855	8.1	1.7	21	
		November	7, 1974	0955	29	2.5	8.5	
		November	7, 1974	1055	90	11	12	
		November	7, 1974	1155	110	9.9	9.0	
		November	7, 1974	1255	120	7.7	6.6	
		November	7, 1974	1355	64	5.9	9.3	
		November	7, 1974	1455	32	3.7	12	
		November	7, 1974	1655	14	3.2	22	
		November	7, 1974	1855	13	2.2	17	

TABLE 24.--Seston analyses of water samples--Continued

Station		Seston					
Number	Name	Date	Time	Weight		Percentage Organic (mg/l)	
				Total (mg/l)	Organic (mg/l)		
11482225	Harry Wier Creek near Orick--continued	November	8, 1974	0255	4.4	0.8	18
		November	8, 1974	0655	.2	.0	.0
		February	6, 1975	1045	20	3.5	17
		February	7, 1975	1615	15	2.3	15
		February	8, 1975	2000	31	3.5	11
		February	8, 1975	2100	56	5.9	11
		February	8, 1975	2200	61	7.3	12
		February	8, 1975	2300	132	9.7	7.4
		February	8, 1975	2400	226	15	6.7
		February	9, 1975	0100	147	12	8.2
		February	9, 1975	0200	104	6.2	6.0
		February	9, 1975	0300	69	5.2	7.5
		February	9, 1975	0400	52	4.1	7.8
		February	9, 1975	0500	50	4.1	8.2
		February	9, 1975	0600	40	3.9	9.8
		February	9, 1975	0800	27	1.6	6.0
		February	9, 1975	1000	21	.7	3.3
11482230	Tom McDonald Creek near Orick	June	1, 1975	1500	4.4	.3	6.8
		June	7, 1975	1330	3.6	.4	11
11482240	Fortyfour Creek near Orick	April	26, 1974	1335	1.2	.0	.0
		July	23, 1974	1515	.5	.1	20
11482250	Miller Creek near Orick	May	8, 1974	1500	6.0	.0	.0
		July	23, 1974	1230	4.1	.8	20
11482260	Miller Creek at mouth, near Orick	April	25, 1974	1100	1.7	.0	.0
		July	18, 1974	2400	3.0	.0	.0
		July	19, 1974	1200	1.6	.0	.0
		September	11, 1974	1200	2.2	1.7	77
		September	17, 1974	1430	1.2	.3	25
		May	31, 1975	1510	6.6	.6	9.1
		June	6, 1975	1530	4.7	.5	11
11482270	Bond Creek near Orick	April	11, 1974	1600	13	.0	.0
		July	18, 1974	2400	2.0	.0	.0
		July	19, 1974	1200	2.0	.1	5.0
		July	24, 1974	1030	4.0	.4	10
		September	11, 1974	1300	2.1	1.2	57
		September	17, 1974	1200	1.8	.5	28
		May	31, 1975	1150	2.7	.0	.0
		June	6, 1975	1300	2.4	.3	12
11482300	Elam Creek near Orick	May	9, 1974	1310	.8	.8	100

TABLE 24.--*Seston analyses of water samples--Continued*

Number	Station Name	Date	Time	Seston			
				Weight		Percentage	
				Total (mg/l)	Organic (mg/l)		
11482310	McArthur Creek near Orick	May	9, 1974	1400	2.8	0.4	14
11482320	Low-Slope Schist Creek near Orick	May	10, 1974	0930	1.2	.0	.0
11482330	Hayes Creek near Orick	July	19, 1974	1150	1.3	.4	31
		July	27, 1974	1430	.4	.0	.0
11482450	Lost Man Creek near Orick	July	18, 1974	2400	2.4	.0	.0
		July	19, 1974	1230	.8	.0	.0
		July	22, 1974	1330	.8	.0	.0
		September	11, 1974	1200	1.7	1.4	82
		September	15, 1974	1100	.9	.8	89
		June	2, 1975	1130	2.2	.7	32
		June	8, 1975	1200	1.3	.1	7.7
11482460	Larry Damm Creek near Orick	July	27, 1974	1030	2.1	.4	19
11482468	Little Lost Man Creek at Site No. 2, near Orick	July	18, 1974	2400	1.2	.2	17
		July	19, 1974	1200	.6	.1	17
		July	22, 1974	1300	.6	.2	33
		September	11, 1974	1200	1.4	1.3	93
		September	15, 1974	1400	.4	.2	50
		November	7, 1974	0535	3.5	2.4	69
		November	7, 1974	0635	4.6	2.7	59
		November	7, 1974	0735	4.5	.9	20
		November	7, 1974	0835	3.2	1.4	44
		November	7, 1974	0935	3.5	.8	23
		November	7, 1974	1100	7.2	1.3	18
		November	7, 1974	1200	4.1	1.2	29
		November	7, 1974	1300	2.4	1.2	50
		November	7, 1974	1400	3.0	1.4	47
		November	7, 1974	1530	1.7	.9	53
		November	7, 1974	1730	.7	.0	.0
		November	7, 1974	1900	3.3	3.0	91
		November	7, 1974	2100	.0	.0	.0
		November	8, 1974	0910	.0	.0	.0
		February	5, 1975	1400	9.8	.7	7.1
		February	6, 1975	0330	8.3	.8	9.6
		February	6, 1975	1410	7.6	1.4	18
		February	6, 1975	2040	.8	.0	.0
		February	8, 1975	2000	7.8	3.0	38
		February	8, 1975	2300	14	2.3	16

TABLE 24.--Seston analyses of water samples--Continued

Number	Station Name	Date	Time	Seston		
				Weight		Percentage Organic (mg/l)
				Total (mg/l)	Organic (mg/l)	
11482468	Little Lost Man Creek at Site No. 2, near Orick--continued	February 9, 1975	0110	20	3.5	17
		February 9, 1975	0200	24	2.7	11
		February 9, 1975	0300	18	2.9	16
		February 9, 1975	0500	10	2.3	23
		February 9, 1975	0700	9.5	2.3	24
		February 9, 1975	0930	8.9	2.3	26
		February 9, 1975	1215	5.7	2.2	39
		June 2, 1975	1415	.8	.2	25
		June 8, 1975	1400	.8	.1	.12
11482480	Berry Glen Creek near Orick	April 25, 1974	1245	7.9	1.7	22
11482500	Redwood Creek at Orick	July 18, 1974	2400	3.0	.5	17
		July 19, 1974	1200	1.9	.4	21
		July 24, 1974	1400	1.8	.3	17
		September 11, 1974	1200	3.3	2.9	88
		September 17, 1974	1645	1.2	.6	50
411734124051302	Redwood Creek Estuary Site 1B near Orick	July 25, 1974	1800	1.5	.4	27
		September 20, 1974	1615	1.6	.9	56
		May 26, 1975	0650	17	.9	5.2
		June 2, 1975	1630	16	.8	5.0
		June 8, 1975	1730	6.6	.4	6.1
411734124051802	Redwood Creek Estuary Site 2B near Orick	July 25, 1974	1845	2.5	.4	16
		September 20, 1974	1615	1.0	.8	80
		May 26, 1975	0755	16	.7	4.5
411732124051802	Redwood Creek Estuary Site 3B near Orick	September 20, 1974	1620	1.3	.6	46
		May 26, 1975	0835	11	.5	4.5
11532602	West End Mill Creek below Red Alder Campground, near Crescent City	August 1, 1974	1200	.3	.1	33
		September 12, 1974	1415	1.2	1.2	100
		September 23, 1974	1445	.4	.2	50
		June 5, 1975	1530	.6	.2	33
11532610	East Fork Mill Creek near Crescent City	August 1, 1974	1200	1.3	.3	23
		September 12, 1974	1330	1.8	1.6	89
		September 23, 1974	1300	.6	.3	50
		June 5, 1975	1315	.6	.2	33
11532620	Mill Creek near Orick	August 1, 1974	1200	.5	.1	20
		September 12, 1974	1200	1.7	1.4	82
		September 23, 1974	1100	.5	.3	60
		June 5, 1974	1115	.8	.2	25
11532630	Mill Creek at mouth, near Crescent City	August 1, 1974	1220	.3	.0	.0

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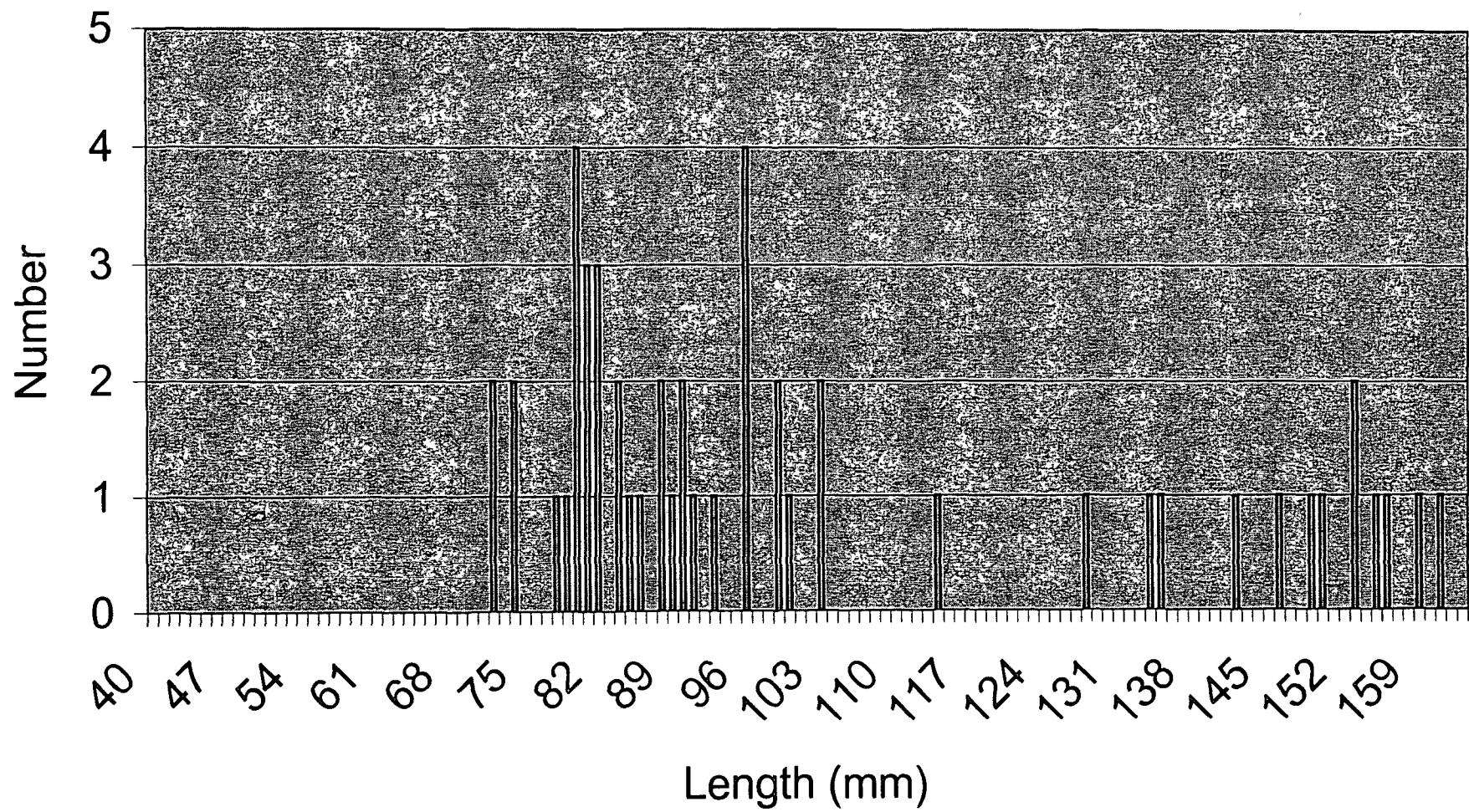
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Length/Frequency, Steelhead, Redwood Creek at Redwood
Valley Bridge, September 26, 1975



**Steelhead Length Frequency, Redwood Creek at
Redwood Valley Bridge, August 2, 1974**

